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BEFORE THE

ILLINOIS COMMERCE COMMISSION

| | | |
|------------------------------------|---|------------|
| STATE OF ILLINOIS, ILLINOIS |) | |
| DEPARTMENT OF TRANSPORTATION, |) | |
| Petitioner, |) | DOCKET NO. |
| -vs- |) | T09-0074 |
| THE TERMINAL RAILROAD ASSOCIATION |) | |
| OF ST. LOUIS (TRRA), |) | |
| Respondent. |) | |
| |) | |
| |) | |
| Petition for an Order granting |) | |
| authority to construct two grade |) | |
| separation structures carrying |) | |
| relocated Interstate Route 70 (FAP |) | |
| Route 999) over and across TRRA's |) | |
| property, including TRRA's Wiggins |) | |
| #2 yard tracks at Railroad Mile |) | |
| Post 1.9 Wiggins Main, near the |) | |
| Village of Brooklyn in St. Clair |) | |
| County, Illinois. |) | |
| |) | |

Wednesday, August 5, 2009
Springfield, Illinois

Met, pursuant to notice, at 9:00 a.m.

BEFORE:

DEAN JACKSON, ALJ

SULLIVAN REPORTING CO., by
Laurel Patkes, Reporter
CSR #084-001340

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32

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6

7 (Appearing on behalf of the Rail
8 Safety Section of the Illinois
9 Commerce Commission.)

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1 PROCEEDINGS

2 (Whereupon TRRA Substitute
3 Exhibit G, Exhibits T through Z,
4 and AA and BB were marked for
5 identification as of this date.)

6 JUDGE JACKSON: Pursuant to the authority
7 vested in me by the Illinois Commerce Commission and
8 the State of Illinois, I will call Docket No.
9 T09-0074 for hearing.

10 This is a petition filed by the
11 Illinois Department of Transportation that involves
12 the TRRA as we know it regarding the
13 Illinois-Missouri bridge project near St. Louis,
14 Missouri and East St. Louis I think about a mile
15 north of the Eads Bridge as the testimony has shown
16 so far.

17 Appearances, please.

18 Department of Transportation?

19 MR. REDMOND: On behalf of the Department, Your
20 Honor, Richard Redmond, Lisa Westapher and Cindy
21 Bushur-Hallam.

22 JUDGE JACKSON: All right. And I need, believe

1 it or not, still again addresses and phone numbers,
2 please.

3 MR. REDMOND: For me and for Ms. Westapher,
4 it's 131 South Dearborn Street, Chicago, Illinois;
5 (312)715-5700.

6 JUDGE JACKSON: Phone number?

7 MR. REDMOND: (312)715-5700 is our general
8 phone number.

9 I can give you my direct if you want;
10 (312)715-5781.

11 JUDGE JACKSON: Thank you.

12 Railroad?

13 MR. REDMOND: Actually, Ms. Busher-Hallam needs
14 to enter her address.

15 JUDGE JACKSON: Oh, I'm sorry.

16 MS. BUSHUR-HALLAM: 2300 South Dirksen Parkway,
17 and that's Springfield, and it's the Illinois
18 Department of Transportation.

19 And then the phone number is
20 (217)782-3215.

21 JUDGE JACKSON: Thank you.

22 Railroad?

1 MS. LEMLEY: Your Honor, there's also an
2 attorney for Missouri Department of Transportation
3 here.

4 Should he be making his appearance?

5 JUDGE JACKSON: Well, let's have the railroad's
6 appearance first.

7 MS. LEMLEY: My name is Katherine Lemley. I'm
8 here with Eddie Lowry and Doug Borgmann
9 (B-o-r-g-m-a-n-n). We're all from Bryan Cave in
10 St. Louis, 211 North Broadway, Suite 3600, St. Louis,
11 Missouri 63102, (314)259-2000.

12 We also have local counsel, Tim
13 Duggan.

14 MR. DUGGAN: Tim Duggan, attorney licensed to
15 practice law in the State of Illinois. Address is
16 426 South Fifth Street, Springfield, Illinois 62701.
17 Phone number is (217)744-1000.

18 JUDGE JACKSON: Thank you.

19 And although Missouri DOT is not a
20 party to the case officially, we have general counsel
21 from MoDOT.

22 MR. MORGAN: My name is Philip Morgan. I'm

1 regional counsel for the Missouri Department of
2 Transportation in St. Louis, 1590 Wood Lake Drive,
3 Chesterfield, Missouri 63017; (314)340-4220.

4 JUDGE JACKSON: Thank you.

5 And we have Commission staff?

6 MR. BLAIR: John Blair appearing on behalf of
7 staff of the Commerce Commission's Rail Safety
8 Section, 527 East Capitol Avenue, Springfield,
9 Illinois 62701. Telephone (217) 785-8421.

10 JUDGE JACKSON: Thank you.

11 Just for the record, we had a very,
12 very brief discussion before we began this morning to
13 see if perhaps we couldn't get a little further in
14 the proceedings by leaving the parties together again
15 to continue negotiations. Apparently we can't.
16 Therefore, we're going to march on, and hopefully we
17 can conclude the evidence today and mark the record
18 heard and taken.

19 If we cannot get through the evidence
20 today, we will certainly set another hearing very
21 soon, a very short date.

22 When we were last together, we had

1 Mr. Greg Horn on the stand. I believe direct
2 examination was finished, and it's time for
3 cross-examination; am I correct?

4 MR. REDMOND: Yes, Your Honor.

5 A couple preliminary matters.

6 JUDGE JACKSON: Oh, yes. Let me touch base on
7 those real quick.

8 Last night I received a copy of IDOT's
9 motion to clarify jurisdiction, okay? So I did
10 receive that last night, and I had asked that the
11 railroad file some kind of a response to that by
12 Friday.

13 Is that still okay or do you need till
14 Monday or Tuesday?

15 MS. LEMLEY: If we could have till Tuesday,
16 that would be great considering we got it also
17 yesterday, and we're here today.

18 JUDGE JACKSON: All right.

19 MS. LEMLEY: Thank you very much.

20 JUDGE JACKSON: Today is August 5th so by next
21 Tuesday, August 11th, if the TRRA would please have a
22 response on file to that motion.

1 I also received separately but same
2 timing the material that, or various e-mails. We've
3 discussed them in evidence which I need to make an
4 in-camera inspection of to determine whether the
5 substance that was redacted from those exhibits,
6 Exhibits 29 and 30, should, in fact, remain
7 privileged. I have not obviously, it having come in
8 last night, but I will get to that by next week also.

9 Fair enough?

10 MR. REDMOND: And then we also had submitted in
11 the same letter to Your Honor the Web site from the
12 Norfolk Southern Corporation containing the
13 information that is presented in Petitioner's
14 Exhibit 28 which were the Norfolk Southern guidelines
15 that appear on its current Web site.

16 JUDGE JACKSON: I just now see that's mentioned
17 in the August 3, 2009 letter. I did not see that
18 though previously.

19 MR. REDMOND: And I believe that complies with
20 your request when we were here last week. The
21 privilege log, the original e-mail messages, as well
22 as proof of the Norfolk Southern Corporation's Web

1 site.

2 JUDGE JACKSON: All right. And that was
3 Petitioner's Exhibit No. 28, correct?

4 MR. REDMOND: That's correct.

5 JUDGE JACKSON: All right. Fair enough.

6 Okay. Mr. Horn, you're in the chair.
7 I would remind you, please, that you are still under
8 oath, and I will give the floor to Ms. Lemley.

9 MS. LEMLEY: Thank you, Your Honor.

10 JUDGE JACKSON: You're welcome.

11 GREG HORN

12 recalled as a witness herein, on behalf of
13 Petitioner, having been previously sworn on his oath,
14 was examined and testified as follows:

15 CROSS-EXAMINATION

16 BY MS. LEMLEY:

17 Q. Good morning.

18 Taking you back to your testimony last
19 Thursday, you had testified that the NF lines, that's
20 the Norfolk Southern lines that are adjacent to the
21 Terminal Railroad lines on the Wiggins Ferry are
22 similar to Terminal Railroad's lines.

1 Do you recall saying that?

2 A. Yes.

3 Q. How are they similar?

4 A. Well, there's storage tracks. There's more

5 than three tracks from what I see.

6 Q. So your assessment of them being similar is

7 that cars are stored on the lines and that there are

8 three tracks?

9 A. That is my understanding.

10 Q. Are the Kansas City Southern lines adjacent

11 to the Terminal Railroad lines similar to the

12 Terminal Railroad lines?

13 A. Yes. There are two tracks there also.

14 Q. So the fact that there are more than one

15 track is what you're drawing as a similarity?

16 A. Yes. From what I understand, they're yard

17 tracks, not through tracks.

18 Q. And on what do you base that understanding?

19 A. Just from talking to our engineers that

20 have been developing plans.

21 Q. The Union Pacific operations near Wiggins

22 Ferry, are those similar to the Terminal Railroad's

1 operations?

2 A. I believe our plans show those as through
3 tracks.

4 Q. And how many tracks?

5 A. I believe there are two.

6 Q. We talked a lot about the overpass that
7 traverses the Wiggins Ferry yard over the Terminal
8 Railroad operations, but we didn't talk about what in
9 particular the measurements are of that overpass as
10 it sits atop the Wiggins Ferry yard, and I'd like to
11 go through that information with you.

12 We have a drawing that we submitted as
13 an exhibit. Would you like to refer to it or do you
14 have it in your memory?

15 I'll be happy to show it to you.

16 May I approach, Your Honor?

17 JUDGE JACKSON: Yes, by all means.

18 Q. I'm handing you what was marked as Exhibit
19 T.

20 Can you tell me what that document is?

21 A. Yes.

22 MR. REDMOND: Objection, Your Honor. I guess

1 since counsel has identified an exhibit that we
2 received -- well, actually, I got the e-mail at 7:10
3 last night with these additional exhibits and this
4 motion.

5 JUDGE JACKSON: Please don't tell me that.

6 MR. REDMOND: That is correct.

7 MS. LEMLEY: Your Honor, I can certainly speak
8 to this.

9 JUDGE JACKSON: Please, because I had asked
10 that the exhibits be exchanged by last Friday at
11 noon.

12 MS. LEMLEY: Last Thursday we came in and in
13 previous discussions with the DOTs, they had not
14 mentioned any of the claims that they made on
15 Thursday previously. It was the first time we'd ever
16 heard of it.

17 We left Thursday evening with a noon
18 deadline to submit all of our exhibits. We
19 diligently attempted to put together all of our
20 exhibits, including rebuttal exhibits to those
21 claims, to submit by midday on Friday.

22 Our investigation is continuing. Many

1 of the claims that they make are very difficult to
2 investigate the truth of the matter, and it was just
3 yesterday that we were able to collect some
4 additional rebuttal information.

5 I do not expect, depending on how far
6 we get today, to use many of these exhibits. The
7 Exhibit T that I've shown Mr. Horn today is a drawing
8 by the Missouri Department of Transportation
9 submitted to Terminal Railroad. I can't imagine that
10 they have an objection to me using that exhibit at
11 this point.

12 JUDGE JACKSON: I have sitting up here on the
13 rail from this morning TRRA's second amended exhibit
14 list for July 30, 2009 hearing, and I believe that
15 includes Exhibits T, Z, AA, and BB; is that correct?

16 MS. LEMLEY: It's T through Z, AA and BB.

17 JUDGE JACKSON: Oh, T through Z.

18 MS. LEMLEY: Yes.

19 JUDGE JACKSON: And these were just provided to
20 Mr. Redmond and his people last night?

21 MS. LEMLEY: Yes, that's the case.

22 I can tell Your Honor that it's

1 doubtful that we will be using those exhibits today
2 with the exception of Exhibit T, and we certainly
3 would give them the opportunity to review them with
4 their people.

5 However, it's extremely prejudicial to
6 us to not allow us to submit rebuttal exhibits to the
7 claims we first heard on Thursday or to require us to
8 do all of our investigation by noon on Friday for
9 those rebuttal exhibits.

10 And I'll tell you also, our
11 investigation is continuing. There's a lot of
12 information, particularly about crash testing and
13 some of the other claims that they made, that's
14 difficult for a private citizen to investigate, so we
15 do still have calls in to people to try to ascertain
16 the truth of the claim that they're making.

17 JUDGE JACKSON: All right.

18 MR. REDMOND: Your Honor, we have several
19 different levels of objection.

20 JUDGE JACKSON: You have what?

21 MR. REDMOND: Several different levels of
22 objections.

1 JUDGE JACKSON: I imagine you do. I'm a
2 reasonable man. I'm going to eventually allow the
3 exhibits to be used.

4 I have the case on a very fast track.
5 We all understand that, and we know why.

6 I'm eventually at some point going to
7 let Ms. Lemley proceed because I want a full record
8 here. I don't need to tell you how important it is.
9 You know. You've been telling me. I'm going to
10 eventually let her do it with all these exhibits. I
11 haven't seen them.

12 Having said that, I also don't think
13 it's fair to question Mr. Horn on exhibits that
14 Mr. Redmond and the petitioner haven't had a chance
15 to read, look at, and talk to their witness about.

16 So what do we do? You tell me. Do we
17 hold Mr. Horn? We're going to have to have another
18 hearing anyway, folks. I mean, I'm not pleased but I
19 understand. I understand you've only had four days,
20 and that was a weekend.

21 MS. LEMLEY: And no discovery, Your Honor.

22 We've been compliant with the schedule

1 that IDOT has requested. However, they came in on
2 Thursday with a stack of exhibits and new claims that
3 we never heard before. We have to be able to protect
4 our client's interests and have a full hearing on
5 this.

6 JUDGE JACKSON: Yes, they did. Absolutely,
7 unquestionable, yes, they did.

8 MS. LEMLEY: And we haven't been able to do any
9 discovery on this.

10 JUDGE JACKSON: Okay.

11 MS. LEMLEY: May I respond, Your Honor?

12 JUDGE JACKSON: I'll give you a second. Take
13 whatever time you want.

14 MR. REDMOND: I think this bit of revision is
15 history. As Your Honor is aware, this case was
16 scheduled for a hearing to commence last Thursday.

17 JUDGE JACKSON: Right.

18 MR. REDMOND: There was a schedule, an order
19 entered by Your Honor to produce documents by a
20 certain date.

21 JUDGE JACKSON: Yes, there was.

22 MR. REDMOND: We complied. TRRA did not. TRRA

1 came with their documents on Tuesday before the
2 Thursday hearing.

3 So our objection was that we've got to
4 go ahead with the hearing. It gives them a technical
5 advantage. Okay. Let's go ahead. So we were under
6 the gun.

7 Then on Thursday, it was by agreement
8 of the parties that we were going to exchange all
9 additional exhibits on Friday. We gave documents.
10 They gave documents. I understand Your Honor wants a
11 full record, but there comes a point where we
12 would -- I guess we're going to have to come back
13 here a second day.

14 JUDGE JACKSON: You know it.

15 MR. REDMOND: I will have no objection, just
16 for purpose of expediency because my client desires
17 expediency, having Mr. Horn questioned off the MoDOT
18 document that has been presented. Presumably he's
19 aware of that document.

20 Beyond that, I would ask for the same
21 courtesy that you afforded TRRA and that's that we'd
22 have a reasonable chance to take a look at the

1 exhibits, but this whole thing started by late
2 filings on the part of TRRA.

3 JUDGE JACKSON: Well, and we don't have -- we
4 are not a U.S. district court. We are not even a
5 circuit court in the sense that we've had the benefit
6 of substantial pretrial discovery, substantial
7 depositions. I've bent over backwards giving
8 petitioner the opportunity, in spite of the
9 railroad's objections, to put forth and question
10 witnesses on its documents which the railroad didn't
11 have for that much time. I'm going to do the same
12 thing for the railroad.

13 MR. REDMOND: I would like to, if we can,
14 finish the hearing today. We have relevancy
15 objections to other of these exhibits that we can
16 present when feasible, but my own goal is to finish
17 this today because --

18 JUDGE JACKSON: Well, then withdraw your
19 objections because if you persist in the objections,
20 I'm continuing this hearing now. I'm ready to.

21 Has everyone exchanged their documents
22 to our knowledge?

1 Mr. Redmond?

2 MR. REDMOND: To our knowledge, yes.

3 JUDGE JACKSON: Ms. Lemley?

4 MS. LEMLEY: Your Honor, we have exchanged
5 everything that we have been able to collect in our
6 investigation. We have been extremely diligent over
7 the last few days.

8 JUDGE JACKSON: I know you have.
9 I'm not going to point fingers at
10 anyone people. I'm not. Let's understand that,
11 okay? I don't need excuses anymore. I need to know
12 what you can do today, and I'm asking that to
13 Ms. Lemley, and, Mr. Redmond, what you can do, and
14 then I'm going to ask Mr. Blair if he can live with
15 that.

16 MR. REDMOND: Well, Your Honor, our position is
17 that I believe we will waive the objection to these
18 documents that are being presented in terms of late
19 presentation if we can get the hearing done today,
20 and we'll still preserve relevancy objections because
21 I think that's fair, but we have, as we announced,
22 Mr. Horn, two other witnesses. They have two

1 witnesses. I don't see why we can't conclude the
2 hearing today. That's my goal.

3 So to the extent that we're put under
4 a little pressure, we're willing to live with that
5 because of this issue that's been discussed.

6 JUDGE JACKSON: Well, let's continue and see
7 how far we get.

8 MR. REDMOND: But we're really going to object,
9 Your Honor, if they start pulling in more documents,
10 attempt to get other witnesses. Then I think that
11 would be highly irrelevant.

12 JUDGE JACKSON: Well, we'll deal with those
13 objections as they come.

14 I want to finish today also but I
15 understand where we are presently.

16 Okay. Ms. Lemley, continue your
17 questioning. Exhibit T is it?

18 MS. LEMLEY: Yes, Your Honor.

19 JUDGE JACKSON: All right. And remind me, has
20 the witness identified what Exhibit T is or have you,
21 counsel?

22 MS. LEMLEY: I think we can start over.

1 JUDGE JACKSON: Yeah, let's do, please.

2 Q. BY MS. LEMLEY: Mr. Horn, I've handed you
3 what is marked as Exhibit T.

4 Do you recognize that document?

5 A. It looked like our preliminary plans for
6 the bridge, cross-section of the bridge.

7 Q. Are these the plans that were submitted to
8 Terminal Railroad to give them the indication on what
9 would be spanning their yard?

10 A. I believe they are.

11 Q. All right. Do they accurately represent
12 what is planned to span the Terminal Railroad's yard?

13 A. They're very close. We have more details
14 now that our final plans are close, but these are
15 what we gave them back as the type, size and location
16 drawings.

17 We refined them a little bit in our
18 final plans, but I believe these are fairly accurate.

19 Q. Did your refinement of those plans in any
20 way impact the measurements of the pavement, girders
21 or span of the overpass?

22 A. You know, I don't know the details. Like

1 this talks about the maximum girder length, and we
2 may have more details now, but it's very close,
3 within a few inches I'm guessing.

4 Q. So within a few inches, the measurements
5 indicated on Exhibit T are accurate?

6 A. Yes. I would believe there's no big
7 changes here.

8 Q. Can you tell me when the drawing on Exhibit
9 T was edited by Missouri Department of
10 Transportation?

11 A. Well, this drawing was January, and we've
12 been updating them ever since in our final plans, and
13 we have a lot of little revisions throughout the
14 whole plans as we do our final plans.

15 Q. Have those revisions been submitted to
16 Terminal Railroad?

17 A. We have submitted some revisions during the
18 time frames as we move farther in the type, size and
19 location drawings, and I don't know exactly when we
20 gave them this and what we've given them since this
21 because I don't know, I haven't been able to look at,
22 you know, find out from our people, go back and

1 review when this was given to them.

2 MS. LEMLEY: Your Honor, I request permission
3 to use the easel.

4 JUDGE JACKSON: Sure.

5 MS. LEMLEY: Thank you.

6 Q. What I'd like to do is question you on the
7 particular measurements of the different portions of
8 the overpass that specifically spans the Terminal
9 Railroad's yard, and feel free to reference Exhibit
10 T.

11 So first we have the barrier rail
12 height that I believe you testified before is
13 42 inches?

14 A. That's correct.

15 Q. To accommodate snow removal issues?

16 A. Yes.

17 Q. You testified to that, correct?

18 A. Yes.

19 Q. And I will label that barrier here.

20 And you said that's 42 inches?

21 A. That is correct.

22 Q. And what is the depth of the pavement?

1 A. It's roughly a foot. I believe this shows
2 nine inches but I can't see.

3 Q. Do you know what the depth is?

4 A. I believe our depth is between nine inches
5 and a foot right now.

6 Q. So nine to twelve inches?

7 A. Yes.

8 Q. What would you need to review to confirm
9 the accuracy of that pavement depth?

10 A. I'd have to look at our latest updated
11 plans.

12 Q. What is the depth of the girder?

13 A. About ten feet.

14 Q. Let's talk about the span. How wide is the
15 total span?

16 A. The total span is 86 feet for the whole
17 thing, but from the center of the bridge are you
18 talking about, from barrier wall in the center to
19 barrier wall on the outside?

20 Q. The entire depth of the span, how many
21 feet, the entire span from edge to edge.

22 A. Okay. I believe it's 86 feet, 86'4";

1 6 inches.

2 Q. I'm sorry. You said --

3 A. I'm sorry. 85 feet. I can't read it.

4 It's 85'6" it looks like on here.

5 Q. 85'6"?

6 A. That's what it shows on this.

7 Q. So the halfway point then in the span would

8 be what?

9 A. It's 42'8" it looks like.

10 Q. There is some space in between the two

11 roadways, correct?

12 A. Yes, there is.

13 Q. So how wide are the two structures?

14 Let's just back up.

15 This is a two-structure overpass,

16 correct?

17 A. That is correct.

18 Q. And they're just a few inches apart?

19 A. That is correct.

20 Q. Can you describe for me what the different

21 measurements are of the two roadways and how much

22 space is in between?

1 A. You have a 6-foot shoulder. You have a
2 barrier wall that goes out about 16 inches from the
3 center. You have a 6-foot shoulder on the inside.
4 Then you have a 12-foot lane, another 12-foot lane, a
5 10-foot shoulder, another 16-inch barrier; so that's
6 the 42'8" on one half.

7 Q. How much space in between the two
8 directions of roadway?

9 A. Just a few inches.

10 Q. And how tall or how much fencing is
11 Terminal Railroad requesting?

12 A. They're asking for the barrier wall and the
13 fencing to be 10 foot minimum height.

14 Q. Okay. So we have 42 inches on the barrier
15 rail, correct, and the fencing then is above that
16 barrier rail limit?

17 A. Yes.

18 Q. So how much fencing is that to make it ten
19 feet?

20 A. 78 inches.

21 Q. So the total of the barrier rail and fence
22 requested by Terminal Railroad is ten feet?

1 A. That is correct.

2 Q. And the total of the pavement and the
3 girder is what?

4 A. About 11 feet.

5 Q. And you were present last Thursday during
6 the opening statement by counsel for IDOT, were you
7 not?

8 A. Yes, I was.

9 Q. And you heard him tell the judge that
10 inspection of this bridge would be impossible by a
11 snooper?

12 A. Yes.

13 Q. If it had the fence on it that Terminal
14 Railroad has requested?

15 A. I don't know the exact wording, but I know
16 that I said we would not use a snooper because it
17 doesn't work.

18 Q. It doesn't work.

19 So it would be impossible to inspect
20 the bridge by a snooper with the fence that Terminal
21 Railroad has requested. That's your testimony?

22 A. My testimony was that it would be -- yeah,

1 my testimony is that it would not work, and we would
2 not use the snooper. It's very impractical to try to
3 use that in this location.

4 I didn't say...

5 Q. It's impractical.

6 A. I don't know if I used the word impossible.

7 Q. I'm handing you the transcript of the
8 hearing dated Thursday, July 30, 2009 here in
9 Springfield, Illinois before the Illinois Commerce
10 Commission. I'll ask you to identify that document.

11 A. Yes.

12 Q. If you would turn to page 101, line 19, and
13 could you read into the record the question and
14 answer through to page 102, line 15?

15 A. "Is it fair..." You want me to read it?

16 Q. Yes.

17 A. "Is it fair to say that your understanding
18 is that TRRA was requesting fencing on top of the
19 heightened barrier, the barrier that had already been
20 heightened by the Department of Transportation?"

21 The answer is: "Yes."

22 "There has been discussion in my

1 opening statement about difficulties that a fence of
2 this height would present for inspection and
3 maintenance."

4 "Yes.

5 "Are you familiar with those issues?"

6 "Yes."

7 Q. I'm sorry. This is not -- I'll just
8 interrupt the witness. This is not where I was
9 asking you to read from.

10 A. Oh, I'm sorry.

11 Q. Let me take that back and highlight the
12 portion for you.

13 I'm handing the transcript back to you
14 with the portion highlighted.

15 MR. REDMOND: Can we identify that for the
16 record?

17 JUDGE JACKSON: Yes; sure.

18 MS. LEMLEY: Yes. I had previously identified
19 it as page 101, line 19 through 102, line 15.

20 THE WITNESS: Would you like me to read that?

21 MS. LEMLEY: Yes, please.

22 THE WITNESS: Okay. "Now, did you make an

1 analysis to try to determine whether or not the
2 provision of the fence of this nature requested by
3 TRRA would affect the ability to operate the
4 snooper?"

5 "Yes, I did."

6 "What did you do?"

7 "I called our engineer and our
8 headquarters that is responsible for this, and I
9 talked to him about what would happen if we had a
10 fence on top of this bridge and would we be able to
11 use our snoopers."

12 "And what were you advised?"

13 "He was advised that the ten-foot
14 fence with the size of large girders would be
15 problematic, and they would not be able to use the
16 snoopers."

17 MR. REDMOND: Your Honor, I'm going to object
18 to any attempt to use this as impeachment.

19 JUDGE JACKSON: Overruled.

20 MR. REDMOND: That's exactly what he said. The
21 impeachment was to say that he had mentioned in his
22 testimony the word "impossible."

1 JUDGE JACKSON: I don't think we're finished
2 yet.

3 MR. REDMOND: Okay.

4 Q. BY MS. LEMLEY: So you testified that the
5 bridge engineer who you relied upon in your testimony
6 regarding the ability of the snoopers to inspect the
7 bridge told you that they would not be able to use
8 the snoopers?

9 A. That's correct.

10 Q. And so is it your testimony that it is
11 impossible to inspect this bridge by a snoopers?

12 A. No. My testimony is that we would not use
13 the snoopers on the bridge.

14 Q. So when you heard counsel for the Illinois
15 Department of Transportation in his opening statement
16 say that it was impossible to inspect that bridge by
17 a snoopers, you disagreed with that statement?

18 A. My statement is that we would not use the
19 snoopers to inspect this bridge. They can be very
20 problematic, and what I have been told is that we
21 would not use the snoopers to inspect this bridge.

22 Q. Is it impossible to inspect this bridge by

1 a snoopers?

2 A. It is not impossible, but we would not do
3 it because of a lot of other constraints.

4 Q. What are those constraints?

5 A. All right. I have talked to our operators
6 of these machines. We have an Aspen 40 and an Aspen
7 50 here at St. Louis, and I have actually this week
8 gone out on the job and met with them and looked at
9 this.

10 The Aspen 40 does not reach around the
11 barrier wall fence. I was told by the operator that
12 with Aspen 50, we would be able to inspect the first
13 girder and the second girder fairly easy, but he said
14 by the time you get into the third girder and the
15 fourth girder, that would be very, very difficult.
16 It would be very time-consuming because you don't
17 have the movement in your machine to inspect the big
18 section. The hydraulics would be all the way out.
19 You know, there's a lot of safety issues with trying
20 to work on this bridge with, you know, there's bounce
21 on the bridge and there's sway in these booms, and
22 you're still standing, and still, the inspection,

1 about the closest you can get is six and a half to
2 seven feet above your head, and you need to be closer
3 than that.

4 So he told me we would not be using
5 the snoopers to inspect the bridge. It would be hard
6 enough to use the snoopers without a fence, but with a
7 fence, they would definitely not be using the
8 snoopers to inspect this bridge.

9 Q. Did they tell you that it was impossible to
10 inspect the bridge by snoopers?

11 A. No, not by snoopers.

12 Q. Do you hold yourself out to be an expert on
13 bridge inspection?

14 A. No, I do not.

15 Q. What specifications did you give the bridge
16 engineer you relied upon as far as what the bridge
17 measurements are that a snoopers would have to
18 traverse?

19 A. We gave them something similar to this, and
20 we talked about a ten-foot fence with a foot thick
21 deck and a ten-foot girder.

22 Q. When you pointed to something similar to

1 this, you meant Exhibit T?

2 A. Yes, Exhibit T. I'm sorry.

3 Q. And you specified a -- could you go back

4 and tell me what you specified to him regarding the

5 barrier rail and fence?

6 A. I told him we would have a barrier wall and

7 fence that goes ten foot over the roadway. Then we

8 have a foot thick deck, like we've drawn here, and

9 about a ten-foot girder.

10 Q. What else did you tell him to consider?

11 A. That we'd have four girders and we'd have

12 about 40 feet, you know, over 40 feet to look on this

13 bridge.

14 Q. What exactly -- strike that.

15 You testified that the Missouri

16 Department of Transportation has the obligation to

17 maintain the bridge?

18 A. Yes, I did.

19 Q. And that included in that obligation is the

20 obligation to inspect the bridge?

21 A. That is correct.

22 Q. I am handing you now what has been marked

1 as Exhibit 23, Petitioner's Exhibit 23. Can you
2 identify that?

3 A. That is our snooper.

4 Q. And that's exactly how you testified to
5 that photo on Thursday, "our snooper."

6 By "our," who are you referring to?

7 A. Missouri Department of Transportation.

8 Q. Does Missouri Department of Transportation
9 own that piece of equipment?

10 A. I believe so. Actually, I've asked them to
11 send me a picture of the snooper but they did not
12 label which one it was, so I can't tell you exactly
13 which one this is.

14 Q. So you can't tell me the make or model of
15 that particular snooper pictured in Exhibit 23?

16 A. Not this particular one.

17 Q. And by virtue of that, you can't testify to
18 the capabilities of that particular snooper pictured
19 on Exhibit 23?

20 A. No. I can testify to the snoopers that I
21 know that we have here in St. Louis.

22 Q. Who provided you with that picture?

1 A. Pat Martins, our bridge engineer.

2 Q. I show you -- the top of the picture is cut
3 off where the arm would go over the fence and go
4 beyond or below the bridge girder, correct?

5 A. Yes, correct.

6 Q. Where is the rest of this picture?

7 A. I don't know.

8 What I asked for is a copy of a
9 picture of a snoopers so we could show the judge what
10 a snoopers looks like. I did not specify -- this was
11 over two weeks ago -- I did not specify give me a
12 special snoopers, and this is what they sent me.

13 Q. So this photo doesn't show anything with
14 regard to the capabilities of a snoopers to go over a
15 fence on a bridge, correct?

16 A. That is correct.

17 Q. I am handing you what has been marked as
18 Petitioner's Exhibit 24.

19 Do you recognize that document?

20 A. Yes, I do.

21 Q. What is it?

22 A. That's the state structures on interstate

1 bridges over railroads. It's from our bridge
2 listing, our inventory of all our bridges that we
3 keep in our headquarters office.

4 Q. This indicates I think you testified to 126
5 interstate overpasses over rail lines in Missouri?

6 A. That is correct.

7 Q. And this is the complete list?

8 A. That is the list that they gave me when
9 I've asked them to query bridges over, interstate
10 bridges over railroads, and I believe it is a
11 complete list.

12 Q. I know that many of these bridges are from
13 the '60s and '70s by the "year built" column.

14 Can you tell me how many were built
15 from 2000 forward?

16 A. I count three or two.

17 Q. You count two?

18 A. Yes.

19 Q. Out of the 126 on this list?

20 A. That is correct.

21 Q. Let's start with the first one.

22 What's the first one on the list built

1 2000 forward?

2 A. It's in St. Louis. It was built in 2008

3 and it was over Metrolink, I-64 over Metrolink.

4 Q. Is that over a through route of Metrolink?

5 A. I believe so.

6 Q. So there's no switching at or near that

7 overpass?

8 A. Not that I am aware of.

9 Q. The next one?

10 A. It was in Phelps County over the Little

11 Piny River and the BNSF Railroad.

12 Q. Is that a mainline through track?

13 A. I do not know.

14 Q. Do you know if there's any switching at or

15 near that overpass?

16 A. I do not know that either.

17 Q. There's one that you passed over on page 1

18 constructed in the year 2000 in Marion County.

19 A. Oh, I see it.

20 Q. Can you identify that?

21 A. Yes. Marion County, Mississippi River, it

22 looks like it's the CST 410 over BNSF Railroad in

1 2000.

2 Q. Is that a mainline through track?

3 A. I have no idea.

4 Q. So you don't know whether or not there's
5 any switching at or near that overpass?

6 A. I do not.

7 Q. And it's your testimony that there is no
8 fencing on any interstate highway overpass that spans
9 a railroad line in the State of Missouri?

10 A. I'm testifying that I've asked for this
11 list and no fencing shows up, so I believe this list
12 is correct.

13 Q. You testified regarding the Kansas City
14 Southern and their request for fencing last Thursday,
15 correct?

16 A. Yes.

17 Q. And you testified that the Kansas City
18 Southern reserved for future consideration fencing on
19 the overpass structure over its rail line to the
20 extent that it determines necessary for safety
21 reasons, correct?

22 A. Yes.

1 Q. You testified that the Union Pacific
2 Railroad likewise reserved fencing in the future if
3 it deems necessary for safety purposes?

4 A. I believe it says if it is deemed
5 necessary. I don't know that it says if the railroad
6 deems it necessary.

7 Now, I'm not -- you know, you'd have
8 to go back to the exhibits and read those.

9 Q. So the Kansas City Southern and the Union
10 Pacific Railroads, and tell me if this is incorrect,
11 they stated that at this time they would not require
12 fencing, but if they required fencing in the future,
13 they would require fencing for safety purposes. Is
14 that accurate?

15 A. I don't have it in front of me, but I
16 believe what they said was if it is deemed necessary,
17 not if they deem it necessary.

18 And I take that as the Department of
19 Transportation, if they have some proven data that
20 shows it's a safety issue, then you know, that we
21 would fence it, yes.

22 Q. So the Missouri Department of

1 Transportation's position is that those railroads
2 would receive fencing only if the Missouri Department
3 of Transportation deemed it necessary for safety
4 purposes?

5 A. That if together we deemed that it's
6 necessary and there is some proven data that shows
7 that.

8 Q. I am handing you what was marked as
9 Petitioner's Exhibit 29.

10 You can take a moment to review it if
11 you need.

12 A. All right.

13 Q. If you turn to page 2, first of all, this
14 exhibit is a string of e-mail correspondence between
15 you and others at the Departments of Transportation
16 and a representative of the Union Pacific Railroad,
17 correct?

18 A. KCS?

19 Q. Oh, I'm sorry. Yes, the KCS.

20 A. Yes.

21 Q. Is that correct?

22 A. Uh-huh.

1 Q. If you turn to page 2, can you read for the
2 record paragraph 2 at the top of the page?

3 A. "KCS's stand on safety fencing is that the
4 agreement language includes something to the effect
5 that safety fencing will be added at a later date if
6 there becomes a safety concern."

7 Q. Was that language incorporated into the
8 grade separation agreement with Kansas City Southern?

9 A. Not at this point.

10 Q. And you read this paragraph to indicate
11 that the Missouri Department of Transportation has to
12 deem it necessary before safety fencing would be
13 erected there?

14 A. I deem it that it says if there becomes a
15 safety concern. It doesn't say KCS. It doesn't say
16 Missouri Department of Transportation.

17 Q. I am handing you what was marked as
18 Petitioner's Exhibit 30. This constitutes e-mails
19 back and forth between yourself and a representative of
20 the Union Pacific Railroad, correct?

21 A. That is correct.

22 Q. And if you turn to the second paragraph,

1 second sentence, I'll read it for the record. "We
2 have determined that the preliminary plans meet
3 UPRR's grade separation guidelines with the following
4 exceptions."

5 And then if you drop to paragraph 4,
6 "Provide language in the agreement stating that
7 fencing will be provided at no expense to UPRR if
8 deemed necessary in the future."

9 Do you see that language on the
10 exhibit?

11 A. I do.

12 Q. Is that language incorporated into the
13 grade separation agreement with Union Pacific
14 Railroad?

15 A. Not at this time.

16 Q. You read that to mean that the Missouri
17 Department of Transportation has to deem it necessary
18 to put fencing there for safety purposes before
19 fencing would be erected there?

20 A. I read it that if it's deemed necessary by
21 both; both parties agree.

22 Q. What exactly would have to be present for

1 the Missouri Department of Transportation to deem it
2 necessary to provide protective fencing on an
3 overpass spanning a railroad yard?

4 A. I can't answer that. I mean, you know, the
5 Missouri Department of Transportation may have some
6 reason in the future to want to put the fence up
7 also.

8 If there's incidents, you know, if
9 there's some proof that there is a safety concern out
10 there, but I can't say exactly what that is because,
11 you know, we'd have to review it.

12 Q. You testified that to your knowledge, there
13 is no instance of fencing on any interstate overpass
14 spanning a railroad track?

15 A. As far as I'm aware, that's correct.

16 Q. So as far as you know, there has been no
17 determination that safety fencing is advisable over a
18 railroad track?

19 A. That is correct.

20 Q. Do you know of any instance whether or not
21 it's an interstate highway where protective screening
22 fences have been erected in the State of Missouri

1 over a railroad track?

2 A. I do not know of any.

3 Q. I am now handing you what has been marked
4 as Exhibit L. I will direct you to page 3 of that
5 exhibit, the second photo.

6 Can you identify what that is?

7 A. It says fences on Chouteau Avenue overpass
8 with no pedestrian walkway.

9 Q. Are you familiar with this overpass?

10 A. I am.

11 Q. This overpass was constructed would you say
12 in the last year?

13 A. Within the last two years.

14 Q. So it's recent?

15 A. It is.

16 Q. And correct me if I'm wrong, there is a
17 pedestrian curbside fence on one side where the
18 pedestrian walkway is, correct?

19 A. That is correct.

20 Q. And there is a chain link fence above the
21 barrier rail that is vertical, not curved, on the
22 other side?

1 A. That is correct.

2 Q. And there's no pedestrian walkway on that
3 side?

4 A. That is correct.

5 Q. You testified on Thursday regarding the
6 cost of the fencing?

7 A. Yes.

8 Q. And I believe you made a statement that the
9 cost of the fencing outweighed the risk of the debris
10 leaving the roadway onto Terminal Railroad's
11 property, correct?

12 A. I don't recall exactly what I said.

13 Q. But is that your opinion?

14 A. My opinion was that the fencing is not
15 necessary because the risk is very minimal.

16 Q. You talked about the estimating guide you
17 used to develop your estimate of the cost of the
18 fencing requested by Terminal Railroad, correct?

19 A. Yes.

20 Q. What in particular is that estimating
21 guide?

22 A. Our bridge engineers have an inventory of

1 items, of bridge items, and it's updated every few
2 months, and the last time it was updated was in
3 April, and I took my information off of that bridge
4 inventory.

5 Q. What exactly did you cost out in your
6 estimate?

7 A. I cost out 1,400 linear feet of fencing at
8 78 inches on top of barrier wall.

9 Q. Did you include in your estimate the
10 barrier wall itself?

11 A. I did not.

12 Q. So all that you costed out was the chain
13 link fencing?

14 A. That is correct.

15 Q. And you costed out 78 inches height of
16 chain link fencing?

17 A. Yes.

18 Q. Anything else you include in that costing?

19 A. There is one piece of that costing that
20 talks about -- typically we slipform the barrier
21 wall, but if we put fencing on top, it's very
22 possible we'd have to form that piece up by hand to

1 put the bolts in, and so there's a cost there that's
2 associated with the fencing.

3 Does that make sense?

4 Q. What was that cost?

5 A. I think I added ten dollars a foot for
6 that.

7 Q. Did you consult with a contractor regarding
8 your estimate?

9 A. Our bridge engineer that reviews estimates.

10 Q. And what is his name?

11 A. Greg Sunday.

12 Q. What is the contingency in this project?

13 A. The contingency?

14 Q. The amount held in contingency on the
15 project for design changes, negotiations with owners.
16 Are you aware of that?

17 A. We have a limit, we have a \$640 million
18 budget, and that's what we plan on our project.
19 That's all we have.

20 You know, as we progress with the
21 plans, you know, we did start out with a contingency
22 of maybe ten percent, and you reduce that as you get

1 to the final details.

2 Q. So the contingency on the project is ten
3 percent?

4 A. At one point it was, yes.

5 Q. Do you hold yourself out to be an expert on
6 lighting?

7 A. I do not.

8 Q. Are you an expert on lighting of railroad
9 tracks?

10 A. I am not.

11 Q. Are you an expert on the reasons why a
12 railroad would want their tracks lighted?

13 A. I am not.

14 Q. You spent some time last Thursday
15 testifying about maintaining the lights that are
16 requested by Terminal Railroad and what a hardship
17 that would be on Missouri Department of
18 Transportation operationally and functionally to
19 maintain the lights.

20 Do you recall that testimony?

21 A. Yes, I do.

22 Q. Have you been privy to discussions with

1 Terminal Railroad where they agreed to maintain those
2 lights?

3 A. They --

4 MR. REDMOND: Objection, Your Honor. Those are
5 settlement discussions.

6 JUDGE JACKSON: Say again.

7 MR. REDMOND: I object those are settlement
8 discussions.

9 MS. LEMLEY: I'll ask the question in a
10 different way.

11 JUDGE JACKSON: All right.

12 Q. BY MS. LEMLEY: Would it alleviate your
13 concerns if Terminal Railroad agreed to maintain the
14 lights?

15 A. Just for maintaining the lights, but we
16 still believe the lights are unnecessary cost to the
17 taxpayer.

18 Q. Is that yes to my question, it would
19 alleviate your concerns?

20 A. No.

21 MR. REDMOND: Objection, Your Honor.

22 JUDGE JACKSON: I think it's a fair question.

1 Q. Would it alleviate your concerns regarding
2 maintenance of the lighting which you testified to
3 last Thursday if Terminal Railroad agreed to maintain
4 those lights?

5 A. Yes, regarding maintenance of the lighting,
6 yes.

7 MS. LEMLEY: If I could take one moment.

8 JUDGE JACKSON: Sure.

9 (Pause)

10 MS. LEMLEY: Just one final question, Mr. Horn.

11 Q. We talked about the snoopers so I want to
12 go back to your discussion about that.

13 You indicated that in your opinion you
14 would choose not to use a snoopers if the fence was
15 erected.

16 A. That is correct.

17 Q. Does the Missouri Department of
18 Transportation intend to use a snoopers to inspect the
19 bridge?

20 A. I talked to our engineer about that, and
21 they would have to look at several options. They'd
22 have to look at going down underneath and doing it

1 from underneath or leasing a larger snooper because
2 there are snoopers out there that can do this.

3 So they would have to weigh those two
4 options to see which one is the most economical.

5 Q. Let me back up to my question and I'll
6 clarify.

7 In the areas without the fence, does
8 the Missouri Department of Transportation intend to
9 inspect the bridge by snooper?

10 A. Yes, they do.

11 Q. And that is from the Illinois side over to
12 the Missouri side, that entire span?

13 A. Not over the river.

14 Q. What will be used over the river?

15 A. We have what's called a traveler built into
16 our project that is a scaffolding underneath the
17 cable stay bridge that is run with an engine, so we
18 are building that into our project as we inspect
19 underneath the cable stay portion of the bridge.

20 Q. And where does that run to and from?

21 A. It runs between the two river piers.

22 MS. LEMLEY: That's all I have. Thank you.

1 JUDGE JACKSON: Mr. Blair, do you have any
2 questions for the witness?

3 MR. BLAIR: Yes.

4 JUDGE JACKSON: Please.

5 MR. REDMOND: Your Honor, just a point of
6 order. Do I have yet redirect?

7 JUDGE JACKSON: Oh, yes.

8 MS. LEMLEY: Your Honor, may I take care of one
9 housekeeping matter.

10 I'd like to mark this as an exhibit
11 just so that we can refer to it as an exhibit in the
12 future; if I can be permitted to do that.

13 Do you have any objection to that?

14 MR. REDMOND: As a demonstrative exhibit?

15 JUDGE JACKSON: For demonstrative purposes?

16 MS. LEMLEY: Right.

17 MR. REDMOND: We have no objections.

18 JUDGE JACKSON: All right. Sure.

19 MS. LEMLEY: All right. Thank you.

20 I'm marking this as Exhibit CC.

21 JUDGE JACKSON: Exhibit which?

22 MS. LEMLEY: Exhibit CC.

1 (Whereupon Exhibit CC was marked
2 for identification as of this
3 date.).

4 JUDGE JACKSON: Mr. Blair?

5 CROSS-EXAMINATION

6 BY MR. BLAIR:

7 Q. With regards to standard engineering
8 practices concerning the design of interstate
9 bridges, you've testified I believe that fencing when
10 there's no walkways is not used, is that correct?

11 A. That is correct.

12 Q. And you've testified to your knowledge that
13 you're unaware of any interstate bridges located in
14 Illinois or Missouri that currently have fencing as
15 requested by the respondent TRRA, is that correct?

16 A. Yeah, over railroad bridges.

17 I'm not sure about Illinois because I
18 don't know, I haven't looked at all their stuff, but
19 in Missouri, yes.

20 Q. You are though aware of interstate bridges
21 that span areas where there's pedestrian traffic, is
22 that correct?

1 A. Yes, many.

2 Q. In fact, you testified, and I believe
3 petitioner submitted exhibits showing pedestrian
4 traffic underneath interstate bridges located in
5 St. Louis.

6 A. Yes, many of them.

7 Our contention is that we have not had
8 an issue of people throwing things out of the car
9 onto any of these pedestrians that has not been an
10 issue with the Missouri State Highway Transportation
11 Department.

12 Q. In your capacity as engineer, would you be
13 aware of those if there was a pronounced incident of
14 pedestrians being hit by debris?

15 A. Yes.

16 I'm not saying that it never happened,
17 but it has not been an issue, you know, throughout
18 the state. I mean, at some point someplace it may
19 have happened, but obviously, we have not fenced all
20 of our highways because we have determined that it's
21 not been an issue.

22 Q. Do you belong to any national organizations

1 as an engineer?

2 A. No, I do not.

3 Q. So basically it's your testimony that
4 you're unaware of any pronounced number of incidents
5 where pedestrians have been struck from debris from
6 an overhead interstate bridge?

7 A. That is correct. I mean, there have been
8 cases where I guess a pedestrian has dropped
9 something off, but that's why we fence bridges over
10 interstates. But exactly what you said, no, I have
11 not been aware of any on interstate bridges.

12 Q. You also testified earlier that the design
13 was changed from a 32-inch barrier wall to a 42-inch
14 barrier wall in an attempt to accommodate
15 respondent's concerns, is that correct?

16 A. That is correct.

17 Q. The standard barrier height is 32 inches
18 high, is that correct?

19 A. That is correct.

20 Q. How often have you increased the height to
21 42 inches at a location?

22 A. I don't know, you know, statewide how often

1 we do that. We did it specifically here because at
2 one of our first railroad meetings, the railroads had
3 requested that because they're concerned about snow
4 plow and things like that, so we accommodated them
5 with that.

6 Q. Are you aware where you've increased the
7 height at any other locations, the 42 inches on
8 interstate bridges?

9 A. You know, I'm not familiar. I mean, I'm
10 sure we have in certain locations but, you know, I
11 can't tell you.

12 Q. You testified that an agreement has been
13 reached in your exhibit; IDOT's exhibit, one of their
14 exhibits shows that an agreement has been reached
15 with the Union Pacific Railroad concerning the
16 fencing issue, is that correct?

17 A. We have a grade separation agreement that
18 has not been signed by either party, but we have
19 incorporated their comments so far. We have received
20 their comments, and we sent them the agreement two
21 months ago, and they have not commented back on the
22 agreement.

1 But, yes, on our type, size and
2 location plans, they have given us all of their
3 comments, and we have incorporated them or we've
4 talked to them about incorporating them all into the
5 plans and the agreement.

6 Q. So, in essence, and correct me if I'm
7 wrong, but essentially what the agreement is is on UP
8 portion where you span UP's tracks, there's been an
9 agreement not to install fencing.

10 However, if deemed necessary after the
11 bridge is constructed and debris flying over the
12 bridge becomes a problem, you agree to install the
13 fencing?

14 A. That is correct.

15 Q. Does Illinois and Missouri DOTs also agree
16 to do the same with the TRRA span; in other words,
17 would you agree that if fencing is not installed now,
18 that after the bridge is constructed and there is
19 evidence of a pronounced number of incidents where
20 debris is flying over the bridge and hitting railroad
21 employees, that you would agree to install the
22 fencing?

1 A. Yes.

2 Q. But essentially what you're saying is your
3 position now is that based on both the departments'
4 past experiences with interstate bridges spanning
5 areas where there's pedestrian traffic where fencing
6 has not been used, there has not been a pronounced
7 incidence of that type of problem?

8 A. That is correct.

9 Q. Last question is more of a structural
10 question.

11 When you add the fencing, I assume you
12 have to recalculate your wind load, the effect that
13 that would have on a bridge, is that correct?

14 A. That's a detail that I'm not aware of. I
15 mean, I'm not a bridge engineer per se so that's a
16 detail I wouldn't have an answer to.

17 Q. It wouldn't be for you, that question
18 wouldn't be for you?

19 A. No.

20 MR. BLAIR: Okay. That's all I have. Thank
21 you.

22 JUDGE JACKSON: Redirect, Mr. Redmond?

1 REDIRECT EXAMINATION

2 BY MR. REDMOND:

3 Q. Mr. Horn, you were shown an exhibit that
4 was marked as Exhibit T in the recently submitted
5 additional exhibits by TRRA.

6 Do you have that exhibit in front of
7 you or should I show it to you?

8 A. Yes, I have it.

9 Q. Is it fair to say that that exhibit depicts
10 a shoulder on the outside lane of the bridge, on both
11 outside lanes of the bridge of ten feet wide?

12 A. That is correct.

13 Q. And is that the current plan proposed for
14 the Mississippi River bridge?

15 A. That is correct.

16 Q. Now, there was a question of you and use of
17 the word snoopers.

18 Would it be fair to say that snoopers
19 is, the word snoopers is somewhat like the word
20 Kleenex in that it was a firm's designation for
21 something that then grew to include a description of
22 many different devices?

1 A. Yes.

2 Q. Would it be fair to say that the technical
3 term for this instrument is a bridge inspection
4 crane?

5 A. Yes.

6 JUDGE JACKSON: A bridge what?

7 MR. REDMOND: Inspection crane.

8 Q. Now, you've testified about two bridge
9 inspection cranes that the Missouri Department of
10 Transportation owns, the Aspen 40 and the Aspen 50.

11 A. Yes.

12 Q. And is it your testimony that an inspection
13 of this bridge, proposed bridge by the Aspen 40 would
14 be physically impossible if this additional fencing
15 were installed?

16 A. That is correct.

17 Q. Why is that?

18 A. The Aspen 40 is a smaller unit, and I don't
19 believe you could get over the fence and below the
20 girder with the second boom.

21 Q. Now, the other one you've testified about
22 is the Aspen 50, is that correct?

1 A. That is correct.

2 Q. And you said in that one, it is a larger
3 unit than the Aspen 40, is that correct?

4 A. That is correct.

5 Q. And in that one, you were advised that you
6 could use that or the fence in place to inspect the
7 first girder and the second girder but the third and
8 fourth girders would become much more problematic?

9 A. That is correct.

10 Q. And could you elaborate on the reason for
11 that?

12 A. Yeah. The boom, when you're getting
13 farther underneath the bridge, if there's no fence
14 there, you can bring the first boom down and you
15 could come up from the bridge from below.

16 With a fence there, the first boom has
17 to go over the fence. The second boom only goes down
18 to just barely below the bottom of the girder, and so
19 you're not coming up from below the girders to
20 inspect the bridge.

21 So you have a problem if the boom is
22 extended, it will be extended all the way out,

1 straight flat out, and all the boom extensions will
2 be basically at the maximum extensions, and it would
3 be very -- it's very difficult they said and very
4 problematic because you're not able to move the boom
5 around to cover any wide area for one.

6 Like in the first and second girders,
7 your arm would be farther away from the bridge so you
8 could inspect a wider section, but as you get farther
9 back, you're pretty much stuck to the one spot, and
10 so you'd have to inspect, come back out and move the
11 truck ten feet, inspect again and get all back under
12 there to inspect again.

13 It would be very time-consuming, and
14 there's also a problem with the extension of the boom
15 being straight out all the way. The top bucket is
16 still six and a half to seven feet above your head,
17 and it doesn't get close enough. What the bridge
18 engineers are looking for, inspectors are looking for
19 is cracks in the steel, and so they say it would
20 still be problematic because you can't get as close
21 as you need.

22 And, of course, there's a safety

1 concern because there is sway in those booms when
2 it's extended all the way out and there is a bounce
3 on the bridge.

4 So there's a lot of issues, and they
5 told me that they would not want to use the UB50, the
6 Aspen UB50 inspecting this bridge with a fence.

7 Q. Now, you did mention in your testimony that
8 there is an item that Aspen makes that could be used
9 to do this work but the Missouri Department of
10 Transportation does not own it, and that's the Aspen
11 62, is that correct?

12 A. I believe it's the Aspen 75 is what they
13 told me.

14 Q. Okay. Aspen 75.

15 What is the cost of purchasing an
16 Aspen 75? Is it over \$500,000?

17 A. Yes, I believe so. I've asked that
18 question, and they said somewhere between 600,000 and
19 a million, but I don't have any hard data.

20 Q. And on the Aspen 75, you also mentioned
21 rental.

22 Were you given any information on how

1 much it would cost to rent such a piece of equipment
2 even if it were available for one day?

3 A. I asked that question, and they said they
4 believed it would be \$20,000 but they didn't know,
5 but they also said if it's billed for a longer time,
6 the price goes down, but they did not do any checking
7 and give me real numbers. That was their feel, the
8 people that work on the bridges, inspectors that
9 understand this stuff.

10 Q. When you undertake a project of this
11 nature, do you make a cost benefit analysis in
12 determining what is reasonable to build and put on a
13 bridge such as this?

14 A. Yes, engineering judgment. We use
15 engineering judgment.

16 Q. At the time you made your judgment about
17 the request by TRRA, had TRRA given you any
18 information other than what was given to you in the
19 letter back from TRRA that was introduced or the
20 request in TRRA's letter?

21 A. No.

22 Q. Now, there was questioning of you on

1 Exhibit L which we have introduced which I've been
2 told it's pronounced Chouteau Avenue if you're in
3 St. Louis -- if you're elsewhere it may be pronounced
4 differently -- but Chouteau Avenue.

5 And if Your Honor can turn to --

6 JUDGE JACKSON: I don't have that with me.

7 MR. REDMOND: Oh, okay.

8 JUDGE JACKSON: Or I don't see it here but
9 there's a lot of paper.

10 MR. BORGMANN: Your Honor, we have a copy of
11 those exhibits if you'd like.

12 JUDGE JACKSON: Yes, please.

13 Q. If you could take a look at page 4 of 7 of
14 Chouteau Avenue, are you familiar with that street?

15 A. Yes, I am.

16 Q. And you live in St. Louis, right?

17 A. Yes, I do. Well, I live in St. Charles
18 County.

19 Q. But you are familiar with the City of
20 St. Louis?

21 A. Yes.

22 Q. Now, this depicts Chouteau Avenue, and I

1 believe it shows a fence on one side of Chouteau
2 Avenue and no fence on the other side of Chouteau
3 Avenue; is that correct?

4 A. Yes, from this picture, there is a piece of
5 a fence on Chouteau Avenue.

6 Q. On the right-hand side, there is fencing on
7 Chouteau Avenue, but on the left-hand side, there is
8 no fencing, is that correct?

9 A. Not at this location on Chouteau.

10 Q. And at this location, Chouteau Avenue goes
11 over tracks, is that correct?

12 A. Yes, I believe so but I can't tell.

13 Q. Now, is the side where fencing is on the
14 side where there's pedestrians.

15 A. Yes, but let me explain also, this is an
16 urban setting, and I have seen people riding on both
17 sides of Chouteau Avenue. It is not an interstate
18 highway. It's a city street, and I have seen people
19 on both sides riding their bike and stuff on both
20 sides, so there again, that's not a -- I mean, that's
21 basically a city street, not an interstate highway.

22 Q. Would you agree that if this bridge

1 included pedestrian walkways, there would be fencing
2 on the side of the bridge?

3 A. Yes.

4 MR. REDMOND: Those are all the questions I
5 have.

6 JUDGE JACKSON: Thank you.

7 Anything further for this witness?

8 MS. LEMLEY: Yes, Your Honor. We'd like to
9 recross.

10 JUDGE JACKSON: We'll allow that.

11 Maybe let me ask just a couple
12 questions real quick.

13 MS. LEMLEY: Sure.

14 JUDGE JACKSON: Does anybody have any
15 objections to that?

16 MS. LEMLEY: No, Your Honor.

17 MR. REDMOND: Can't object to what a judge
18 wants to do, Your Honor.

19 JUDGE JACKSON: Well, sure you can.

20 EXAMINATION

21 BY JUDGE JACKSON:

22 Q. I just want to refer to Exhibit No. 21,

1 Petitioner's Exhibit No. 21, all right, five or six
2 feet long engineering drawing.

3 Just for clarification, I am wondering
4 whether you have any knowledge -- I'm looking at
5 let's say the spans between pier 18 and 19 which has
6 TRRA track 1, 2, 3 and 4 underneath, the span pier 19
7 to pier 20 which has TRRA Wiggins No. 23 track
8 underneath.

9 A. Uh-huh.

10 Q. Between pier 20 and pier 21 which has TRRA
11 Wiggins #24 track, 25, and 26, as well as KCS yard
12 track #4, KCS yard track #1, KCS Brooklyn main track,
13 existing UP #1 main track, and existing UP #2 main
14 track underneath, and lastly, between pier 21 and 22
15 which shows Norfolk Southern yard track #1, D main,
16 NSD main track #1. They're two separate tracks,
17 those are, NS yard track #2, NS yard track #3, NS
18 yard track #4 and NS yard track #5.

19 Do you have any knowledge what actual
20 train traffic is on any or each of those tracks under
21 those four spans such as numbers of trains, speeds of
22 trains, makeup of trains? Do you have any knowledge

1 on that issue?

2 A. No. My only knowledge would be whenever
3 I've been out there which has been, you know, 15
4 times, that there have been trains parked along many
5 of those tracks, but, you know.

6 Q. All right. So you cannot say or you don't
7 have specific knowledge that say on KCS yard track #4
8 which is underneath span pier 20 and pier 21 that
9 there are ten trains per day, switching trains at ten
10 mile an hour or less on that track?

11 A. No.

12 JUDGE JACKSON: Okay. That's all I have.
13 Thank you.

14 All right. Ms. Lemley?

15 MS. LEMLEY: Thank you, Your Honor.

16 RECROSS-EXAMINATION

17 BY MS. LEMLEY:

18 Q. In questioning by Mr. Blair, you stated
19 that it was a matter of standard engineering design
20 not to put fencing on interstate overpasses spanning
21 rail tracks?

22 A. I'm saying it's Missouri interstate design

1 that we don't put fencing on interstate tracks.

2 Q. Can you speak to any other state?

3 A. No. Every state is going to be different.

4 Q. So there's no industry standard on fencing

5 on interstate overpasses?

6 A. Not that I know of.

7 Q. And you stated that you don't subscribe to

8 a national group of engineers?

9 A. That is correct.

10 Q. You testified regarding overpasses with

11 pedestrians underneath.

12 A. Yes.

13 Q. And you were referring to the Exhibit

14 No. 26 that you testified to on Thursday in

15 connection with your answers?

16 A. Yes.

17 Q. And these are the photos of pedestrian

18 sidewalks under highways in downtown St. Louis?

19 A. That is correct.

20 Q. Are these areas under the overpass work

21 sites? You spoke about pedestrians traveling. Are

22 they work sites?

1 A. I do not believe so. They're parking lots
2 and sidewalks.

3 Q. Are there rails under the overpasses
4 pictured?

5 A. No, there are not.

6 Q. So these aren't overpasses spanning rail
7 yards?

8 A. No. They're overpasses spanning where
9 people are underneath them.

10 Q. You talked about the Department of
11 Transportation accommodating a railroad request that
12 the barrier rail be increased from 32 inches to
13 42 inches, is that correct?

14 A. That is correct.

15 Q. And you testified last Thursday that that
16 was due to snow removal concerns?

17 A. That's what the railroad had asked us early
18 on.

19 Q. Which railroad was that?

20 A. I believe it was UP; David McKernan was the
21 one that asked that.

22 Q. I'm handing you what's been marked as

1 Exhibit B.

2 Can you identify that document?

3 A. That's the BNSF Railway-Union Pacific
4 Railroad Guidelines for Railroad Grade Separation
5 Projects.

6 Q. Have you seen this document before today?

7 A. I have.

8 Q. Have you reviewed it?

9 MR. REDMOND: Your Honor, this is going beyond
10 the scope of cross-examination.

11 JUDGE JACKSON: You know, in a sense it is and
12 in a sense it's not given the fact that there were
13 redirect questions about fencing on various
14 overpasses, so I'm going to let her continue for now.

15 Q. BY MS. LEMLEY: Would you turn to page 26
16 of these guidelines? Are you there?

17 A. Yes.

18 Q. And turn to Section 5.4.1 relating to
19 barrier rail.

20 A. Yes.

21 Q. And if you want to follow along with me,
22 the first sentence of the first paragraph states,

1 "Cast-in-place concrete barrier rail without openings
2 and a minimum height of 30 inches shall be provided
3 on both sides of the superstructure to retain and
4 redirect errant vehicles."

5 Do you see where I just read?

6 A. Yes.

7 Q. And if you drop down to the next paragraph,
8 it states, "Barrier rail for overhead structures
9 which may be subject to snow removal shall be a
10 minimum of 42 inches in height with a four-foot wide
11 shoulder or 30 inches in height with a six-foot wide
12 shoulder."

13 Do you see that?

14 A. I do.

15 Q. So the 42-inch barrier rail comports with
16 the UP guidelines for safety, correct?

17 A. Well, that --

18 MR. REDMOND: Objection.

19 JUDGE JACKSON: What's the objection?

20 MR. REDMOND: It says 42 inches in height with
21 a four-foot wide shoulder. There's a ten-foot wide
22 shoulder here.

1 Q. BY MS. LEMLEY: You stated previously that
2 you increased the height of the barrier rail to
3 42 inches per the request of Union Pacific, correct?

4 A. That is correct.

5 Q. And isn't it correct that the Union Pacific
6 railroad safety guidelines, Exhibit B, states that
7 for snow removal, a 42-inch barrier rail is required?

8 MR. REDMOND: Again, our objection.

9 JUDGE JACKSON: Overruled.

10 A. It states that with a four-foot shoulder.
11 It says 30 inches with a six-foot. We're at a
12 ten-foot shoulder.

13 Q. Does it state for snow removal a 42-inch
14 barrier?

15 A. With a four-foot shoulder, that's what it
16 states.

17 Q. Okay. You've stated in response to
18 questioning by Mr. Blair a moment ago that you were
19 not aware of pronounced incidents of debris hitting
20 pedestrians on overpasses.

21 A. That is correct.

22 Q. But I think you said you are aware of

1 incidences of debris hitting pedestrians.

2 A. Well, pronounced has not been an issue is
3 what I'm saying.

4 Q. Pronounced.

5 A. It's not statewide. It's not been, you
6 know, deemed a safety hazard to have debris throwing
7 from the highway.

8 Q. You would agree that debris from the
9 highway naturally travels over the side of an
10 interstate overpass from time to time?

11 A. It's possible, yes.

12 MS. LEMLEY: That's all I have, Your Honor.
13 Thank you.

14 JUDGE JACKSON: Last chance, Mr. Blair.
15 Anything?

16 MR. BLAIR: Two things.

17 RECROSS-EXAMINATION

18 BY MR. BLAIR:

19 Q. Clarification. In Missouri, it's standard
20 engineering practice not to put fencing on interstate
21 bridges, is that correct?

22 A. That is correct.

1 Q. And so that would be for any reason,
2 period?

3 A. As far as I know, yes.

4 Q. Okay. And in regards to what you just
5 testified, the Union Pacific's criteria with the
6 design of a ten-foot shoulder, based on your
7 understanding of their criteria, what would the
8 barrier height be required?

9 A. 30 inches because we have a ten-foot
10 shoulder. It calls for a 30-inch barrier with a
11 six-foot shoulder, and we have a ten-foot shoulder,
12 so I believe we've gone above and beyond.

13 MR. BLAIR: Okay. That's all I have. Thank
14 you.

15 JUDGE JACKSON: Last chance, Mr. Redmond.

16 MR. REDMOND: I'll pass.

17 JUDGE JACKSON: All right. Thank you.

18 MS. LEMLEY: Your Honor, we do have an
19 additional question. I apologize.

20 MR. REDMOND: I object, Your Honor.

21 JUDGE JACKSON: I think that's probably
22 sustainable.

1 Let me hear the question because we
2 only had Mr. Blair ask a couple very simple
3 questions.

4 MS. LEMLEY: If you can give me one moment.

5 (Pause)

6 MS. LEMLEY: Okay. We pass. Thank you.

7 JUDGE JACKSON: Okay. Thank you.

8 Thank you, Mr. Horn. Appreciate it.

9 (Witness excused.)

10 MR. REDMOND: Your Honor, our next witness is
11 Ms. Gwen Lagemann.

12 JUDGE JACKSON: Why don't we take 15 minutes
13 since we're between witnesses.

14 (Recess taken.)

15 JUDGE JACKSON: Back on the record.

16 I believe you've been sworn, is that
17 correct?

18 MS. LAGEMANN: Yes, I have.

19 JUDGE JACKSON: All right. You are still
20 sworn.

21

22 GWEN LAGEMANN

1 called as a witness herein, on behalf of Petitioner,
2 having been first duly sworn on her oath, was
3 examined and testified as follows:

4 DIRECT EXAMINATION

5 BY MR. REDMOND:

6 Q. Please state your name and spell your last
7 name.

8 A. Gwen Lagemann (L-a-g-e-m-a-n-n).

9 Q. Ms. Lagemann, what is your present
10 employment?

11 A. I work for the Illinois Department of
12 Transportation.

13 Q. What is your position at IDOT?

14 A. MRB programming engineer.

15 Q. And does MRB mean Mississippi River Bridge?

16 A. Yes, it does.

17 Q. What are your duties as the MRB program
18 engineer?

19 A. I coordinate within the various sections
20 within IDOT to ensure the Illinois projects are on
21 schedule and the required funding is programmed in
22 the appropriate fiscal year.

1 Q. How long have you held this position?

2 A. Since February 2008.

3 Q. What position did you hold at IDOT -- well,

4 let's go back.

5 What is your educational background?

6 A. I have a Bachelor's of Science and a

7 Master's of Science in civil engineering from

8 Southern Illinois University-Edwardsville.

9 Q. And following receipt of your Master's of

10 Science degree in engineering, did you start work?

11 A. I began after completion of my Bachelor's

12 of Science.

13 Q. And have you worked for IDOT throughout

14 your career?

15 A. Yes, I have.

16 Q. Do you hold any professional

17 qualifications?

18 A. I'm a licensed professional engineer in

19 Illinois and Missouri.

20 Q. Do you belong to any engineering

21 organizations?

22 A. No, I don't.

1 Q. Are you familiar with the Illinois
2 Department of Transportation Bureau of Design Manual
3 on Highway Lighting?

4 A. Yes.

5 Q. I would like to show you what I have marked
6 as Petitioner's Exhibit 33 for identification.

7 Can you tell me what this document is?

8 A. This is an excerpt from our Bureau of
9 Design & Environment Manual on highway lighting.

10 Q. And by "our," are you referring to IDOT's
11 Bureau of Design?

12 A. Yes.

13 Q. What is this manual?

14 A. It is a policy guide on all design elements
15 for roadways within the State of Illinois.

16 Q. Is it your understanding that the Illinois
17 Department of Transportation follows this policy
18 guideline?

19 A. Yes.

20 Q. Is there a provision in the Bureau of
21 Design Manual for highway lighting?

22 A. Yes.

1 Q. Is that provision found at Chapter 56,
2 Section 2.06?

3 A. Yes.

4 Q. And does the Petitioner's Exhibit 33
5 correctly depict that part of the manual that refers
6 to highway lighting?

7 A. Yes.

8 Q. Now, what I'm going to ask you to do is
9 first read the particular provision and then explain
10 how it operates in connection with this particular
11 bridge, the proposed Mississippi River bridge, so
12 first, could you read it?

13 A. It's Chapter 56-2.06, Bridge Structures and
14 Underpasses. Because of a typical configuration and
15 length to height ratio, underpasses generally have
16 good daylight penetration and do not require
17 supplemental daytime lighting. Underpass lighting
18 generally is installed to enhance driver visibility
19 after daylight hours.

20 When a length to height ratio of the
21 underpass exceeds approximately 10 to 1, it is
22 usually necessary to analyze specific geometry and

1 roadway conditions, including vehicular and
2 pedestrian activity, to determine the need for
3 supplemental daytime lighting.

4 On highways that are not continuously
5 lighted, consider providing underpass lighting where
6 frequent nighttime pedestrian traffic exists through
7 the underpass or where unusual or critical geometry
8 exists within or on an approach to the underpass.

9 Provide highway lighting on all
10 highways that are continuously lighted. Favorable
11 positioning of conventional highway luminaires
12 adjacent to a relatively short underpass often can
13 provide adequate illumination within the underpass
14 without a need to provide supplemental lighting.

15 If this action is considered, ensure
16 that shadows cast by the conventional luminaires do
17 not become a visibility problem within the underpass.

18 Q. Are you familiar with this provision in
19 your experience at the Illinois Department of
20 Transportation?

21 A. Yes.

22 Q. Now, in the first paragraph there is a

1 statement with respect to length to height ratio. Do
2 you see that provision?

3 A. Yes, I do.

4 Q. Could you explain how that works?

5 A. The length to height ratio for an
6 underpass, the length of the underpass would be in
7 the direction of the traveled way for the vehicle
8 traveling underneath the bridge, so that would be the
9 length.

10 For our situation, the bridge overhead
11 is approximately 86 feet wide, so that would be the
12 length of the underpass in the direction of travel
13 for the train in this case.

14 Q. So the length in this equation is 86 feet,
15 is that correct?

16 A. Yes.

17 Q. Okay. Now, the other part of the ratio is
18 the number 1. What does that refer to?

19 A. 1 refers, it's a 10 to 1 ratio referring to
20 length to height; in this case, the height. It's my
21 understanding the height of clearance from the top of
22 rail to the bottom of the bridge varies from

1 approximately 32 feet to 42 feet, so taking the worst
2 case being 32 feet, that would replace the 1 in this
3 equation.

4 Q. So what is the length to height ratio for
5 the proposed Mississippi River bridge in the vicinity
6 between the piers that encompass the TRRA tracks?

7 A. It would be an 86 to 32 ratio which is 2
8 point something.

9 Q. But certainly it's far less than 10 to 1,
10 is that correct?

11 A. Yes.

12 Q. So does the proposed Mississippi River
13 bridge meet the 10 to 1 ratio referenced in
14 Section 56-2.06?

15 A. No.

16 Q. Was IDOT aware of TRRA's request to provide
17 lighting underneath the proposed Mississippi River
18 bridge?

19 A. Not until their comments back to MoDOT.

20 Q. Again, if you can talk a little slower.
21 Like Mr. Horn, you tend to talk quickly.

22 So my question is, was IDOT made aware

1 of TRRA's request for lighting under the bridge at
2 some time?

3 A. Yes.

4 Q. When were they made aware of it?

5 A. When they responded to the TS&L provided by
6 MoDOT.

7 Q. You've used the word TS&L. What does that
8 mean?

9 A. That is type, size and location.

10 Q. And is that a common engineering term for
11 the specifications related to the proposed bridge?

12 A. Yes.

13 Q. So as I understand it, TRRA's response to
14 the proposed type, size and location drawings that
15 were sent to them by MoDOT included this request for
16 lighting, and then MoDOT shipped this request to the
17 Illinois Department of Transportation, is that
18 correct?

19 A. They shared those comments with us.

20 Q. And did you analyze those comments?

21 A. Yes.

22 Q. Did you take a position with respect to the

1 request of TRRA for lighting underneath the bridge?

2 A. Yes.

3 Q. What was your position?

4 A. We believe lighting was not warranted.

5 Q. Why did you believe lighting was not
6 warranted?

7 A. Based on our BDE highway lighting policy.

8 Q. And can you be specific on your reasoning
9 behind this?

10 A. Because the length to height ratio is far
11 below the 10 to 1 as indicated in the policy, the
12 total span of the bridge is very far apart, they're
13 not closed piers, they're actually open columns, we
14 believe adequate daylight penetration would be
15 provided.

16 Q. Did you give any consideration as to
17 whether lighting in this area would be an attractive
18 nuisance?

19 A. We did.

20 Q. And what was your consideration and your
21 conclusion?

22 A. That was based off a response actually from

1 the Kansas City Southern where they had indicated
2 they believed this would be an attractive nuisance in
3 this area.

4 Q. By this, you're referring to the lighting?

5 A. Yes.

6 Q. Did you consider the question of
7 maintenance if a light went out?

8 A. Yes.

9 Q. What was your consideration and what was
10 your conclusion?

11 A. We felt that for the DOTs to maintain the
12 lighting would be problematic. First off, the DOTs
13 would not be underneath the bridge regularly. We
14 would rely on the railroad to tell us when a light
15 was extinguished.

16 Sometimes the DOTs contract out, you
17 know, fixing the lights, so it's my understanding any
18 contractors entering railroad property would have to
19 go through their process of obtaining right-of-entry
20 permits and necessary insurances.

21 Q. Again, please slow down in your testimony
22 for the benefit of the court reporter.

1 A. They would need to acquire the necessary
2 right-of-entry permits and insurances every time a
3 bulb needed replaced.

4 Q. Now, have you been shown pictures of
5 lighting that have been identified as Exhibit L in
6 the subsequent amended exhibits submitted by TRRA?

7 A. Yes.

8 Q. And do those purport to show at various
9 places lighting underneath the TRRA trackage under
10 Jefferson Avenue?

11 And I'm referring to page 2 of 7.

12 A. Yes.

13 Q. Do those pictures change your mind with
14 respect to your opinion concerning lighting under the
15 proposed MRB bridge?

16 A. No.

17 Q. Why not?

18 A. This photograph on page 2 was taken during
19 the daytime, and the light is not illuminated.

20 Q. Is there lighting in the northern portion
21 of the property where the bridge is crossing the TRRA
22 tracks currently?

1 A. I don't believe so.

2 Q. I would like to show you what has been

3 submitted as Exhibit N by TRRA, a document entitled

4 "TRRA Wiggins South Lighting Locations."

5 Are you familiar with this exhibit?

6 A. Yes.

7 Q. And what does it depict?

8 A. It depicts --

9 Q. Well, let me back up.

10 Are you familiar with the TRRA yard?

11 A. Yes.

12 Q. In this area?

13 A. Yes.

14 Q. Is that what is known as the Wiggins #2

15 yard?

16 A. Yes.

17 Q. How are you familiar with it?

18 A. On a previous project, we located Illinois

19 Route 3 project, we worked with all the railroads to

20 potentially relocate many of their tracks for that

21 project, and I was provided with plans showing many

22 of the existing railroad lines and facilities in the

1 area.

2 Q. And have you made personal visits to the
3 TRRA Wiggins #2 yard?

4 A. Yes.

5 Q. Now, Exhibit N has identifications which,
6 pictures which presumably show lights of some sort in
7 an area which is presumably the TRRA yard, is that
8 correct?

9 A. Yes.

10 Q. Where are those lights located?

11 A. The lights shown in the exhibit are at the
12 south end of the Wiggins 2 yard.

13 Q. Where is the proposed Mississippi River
14 bridge to be placed?

15 A. Towards the north end of the Wiggins 2
16 yard.

17 Q. And if you can take a look at what has been
18 previously marked as Petitioner's Exhibit 3, can you
19 identify from Petitioner's Exhibit 3 where the lights
20 are located that are depicted on the first page of
21 TRRA's Exhibit N?

22 A. The lights are located at the south end of

1 the yard towards the bottom of the page.

2 Q. And is that near the area identified in the
3 bottom of Petitioner's Exhibit 3 as proposed PE?

4 A. Proposed PE, yes.

5 Q. Are you aware of the Illinois standards for
6 bridges?

7 Let me rephrase the question.

8 Does the Illinois Bureau of Design &
9 Environment Manual include standards for bridges?

10 A. Yes.

11 Q. Are you aware of those standards?

12 A. Yes.

13 Q. I would like to show you what we have
14 marked as Petitioner's Exhibit 35 and ask you if you
15 are familiar with this document.

16 A. Yes.

17 Q. What is it?

18 A. This would be an excerpt from Chapter 58 of
19 our Bureau of Design & Environment Manual.

20 Q. And does this provide that the districts of
21 the Illinois Department of Transportation are to
22 provide an evaluation on the need for fencing when

1 requested?

2 A. Yes.

3 Q. Do you work in a particular district of the
4 Illinois Department of Transportation?

5 A. Yes.

6 Q. What district?

7 A. District 8.

8 Q. Is District 8 the district that covers the
9 area where the proposed Mississippi River bridge is
10 to be located?

11 A. Yes.

12 Q. Has District 8 provided for fencing on any
13 interstate bridges crossing railroad tracks within
14 District 8?

15 A. No.

16 Q. Why not?

17 A. According to the manual, fencing is to be
18 provided when pedestrians or bicyclists are present.

19 Q. Are pedestrians or bicyclists going to be
20 permitted on the proposed Mississippi River bridge
21 project?

22 A. No.

1 Q. Why not?

2 A. There is a law in Illinois that the
3 Department may prohibit pedestrians and bicyclists
4 from using fully accessed controlled roadways, and we
5 do prohibit them.

6 Q. And is the law you referred to 625 ILCS
7 5/11-711?

8 A. Yes.

9 Q. I'm going to show you what is marked as
10 Petitioner's Exhibit 36 and ask you if this is the
11 statute, if this is a copy of the statute that you
12 just referred to?

13 A. Yes.

14 Q. And what does -- first of all, this refers
15 to controlled access highways.

16 Is the proposed Mississippi River
17 bridge to be a controlled access highway?

18 A. Yes.

19 Q. And, in fact, it's to be a fully controlled
20 access highway, is that correct?

21 A. Yes.

22 Q. What does that mean?

1 A. That means ingress and egress from the
2 interstate is only allowed at ramp terminals from
3 connecting roadways.

4 Q. And how does IDOT notify the public that
5 bicyclists and pedestrians are not allowed on
6 interstate highways?

7 A. There is a regulatory sign posted at the
8 top of the ramp right as you get on the ramp terminal
9 from the state highway or county road, whatever it
10 may be, that notifies you that bicyclists and
11 pedestrians along with some other vehicles are
12 prohibited.

13 Q. And is IDOT and District 8 going to post
14 these signs at all the entrances to I-70 after it's
15 placed on the Mississippi River, new Mississippi
16 River bridge?

17 A. Yes.

18 Q. Did you take at our request a survey of
19 highway bridges that cross TRRA tracks?

20 A. Yes.

21 Q. Are you a resident of the area where the
22 Mississippi River bridge is going to be constructed?

1 A. Yes.

2 Q. How long have you lived in that area?

3 A. My whole life.

4 Q. Are you familiar with the bridges that

5 currently cross TRRA tracks?

6 A. Yes.

7 Q. And what was the result -- tell us what you

8 did and tell us the result of your survey.

9 A. I drove all of the bridges that our

10 inventory indicated cross TRRA tracks and found no

11 fencing on any of the bridges.

12 Q. And was the first bridge or one of the

13 bridges that you drove the Poplar Street bridge

14 across the TRRA tracks which are part of the Wiggins

15 #5 yard?

16 A. Yes.

17 Q. What did you find?

18 A. No fencing.

19 Q. Was another bridge that you crossed the

20 McKinley bridge on the Missouri side?

21 A. Yes.

22 Q. Does it cross TRRA tracks?

1 A. Yes.

2 Q. What did you observe?

3 A. No fencing.

4 Q. Was the third bridge that you crossed the

5 Eads (E-a-d-s) bridge which the City of St. Louis

6 owns?

7 A. Yes.

8 Q. What was your observation?

9 A. No fencing over the railroad tracks.

10 Q. Was the next bridge that you crossed the

11 MLK or Martin Luther King bridge?

12 A. Yes.

13 Q. That crosses the TRRA tracks twice, is that

14 correct?

15 A. Yes.

16 Q. What did you observe?

17 A. No fencing.

18 Q. Was the next bridge that you crossed in

19 your area the I-55/I-70 B&O bridge?

20 A. Yes.

21 Q. Does that cross TRRA tracks?

22 A. Yes.

1 Q. What did you observe?

2 A. No fencing.

3 Q. Was the next bridge that you crossed the

4 Interstate 64 bridge between 20th and 25th Street?

5 A. Yes.

6 Q. Does that cross TRRA tracks?

7 A. Yes.

8 Q. What did you observe?

9 A. No fencing.

10 Q. Was the next bridge that you crossed the

11 Broadway Bridge?

12 A. Yes.

13 Q. Does that cross TRRA tracks?

14 A. Yes.

15 Q. What did you observe?

16 A. No fencing.

17 Q. And finally, did you cross the 19th Street

18 bridge in Granite City?

19 A. Yes.

20 Q. Does that cross the TRRA tracks?

21 A. Yes.

22 Q. And what did you observe?

1 A. No fencing.

2 Q. And by no fencing, are you referring to any
3 fencing on the side of the bridge?

4 A. Yes.

5 Q. So am I correct in stating that having
6 crossed all these eight bridges that themselves cross
7 TRRA tracks, you did not see any fencing of the
8 nature requested by TRRA here on those bridges?

9 A. That's correct.

10 Q. And, Ms. Lagemann, did we request that you
11 review the files of the Illinois Department of
12 Transportation that relate to the MRB project?

13 A. Yes.

14 Q. I would like to show you what I have marked
15 as Petitioner's Exhibit 40.

16 Can you identify that document?

17 A. This is a letter from Design Nine to the
18 Terminal Railroad regarding several structures that
19 were part of the original design of the MRB project
20 and I believe also some of the Route 3 project.

21 Q. Is there any reference in this letter to
22 the proposed MRB project, in this document I should

1 say?

2 A. Yes.

3 Q. Where is the reference?

4 A. The reference is made in the October 18,
5 2002 letter from Dale Zurliene (Z-u-r-l-i-e-n-e) to
6 Mr. Dan Morton.

7 Q. And is that the last letter attached to
8 this exhibit?

9 A. Yes.

10 Q. Could you point out where in that letter a
11 reference is made to the MRB project?

12 A. References are made at No. 1, No. 2, No. 3,
13 and the additional requirements and recommendations
14 within No. 4 would also apply to those.

15 Q. Do any of those references contain
16 statements with respect to the fencing issue?

17 A. Yes.

18 Q. Can you identify those references?

19 A. Item 4G.

20 Q. Would you state what item 4G states? Just
21 read it, please.

22 A. Pedestrian fencing should be provided for

1 all overhead structures designed to carry pedestrian
2 or bicycle traffic.

3 Q. Are there any other references to fencing
4 in this October 18, 2002 letter?

5 A. I did not see any.

6 Q. Was this letter found in the files of the
7 Illinois Department of Transportation related to the
8 MRB project?

9 A. Yes.

10 Q. Was it your understanding, was this
11 letter's statement concerning fencing consistent with
12 your understanding of TRRA's position with respect to
13 fencing before the TRRA letter of February 13, 2009
14 which is identified as Petitioner's Exhibit 13? And
15 I will show that to you. This is the letter from
16 TRRA to Greg Horn dated February 13, 2009 in which
17 they do request fencing.

18 Are you familiar with that document?

19 A. Yes.

20 Q. So was it your understanding that TRRA was
21 not requesting fencing before you saw this letter of
22 February 2009 in which they did request fencing?

1 A. That's my understanding.

2 Q. Did TRRA provide to you any information
3 supporting its request for fencing other than what's
4 stated in that letter?

5 A. I am not aware of any.

6 Q. Ms. Lagemann, at our request, did you
7 inquire of the Department of Transportation as to
8 whether they had historic photography of the Wiggins
9 #2 yard?

10 A. Yes.

11 Q. And were you provided pictures of the
12 Wiggins #2 yard that are identified with certain
13 documents?

14 A. Yes.

15 Q. I would like to show you what I have marked
16 as Petitioner's Exhibit 48 for identification and ask
17 you if you can recognize that.

18 A. Yes.

19 Q. Are these the photographs that were sent to
20 you by IDOT in response to your request?

21 A. Yes.

22 Q. Is one of IDOT's obligations and part of

1 its business to take photographs of either rails or
2 highways in the State of Illinois?

3 A. Yes.

4 Q. Do you rely upon IDOT aerial photography
5 from time to time in your work?

6 A. Yes.

7 Q. Have you found the photography to be
8 accurate?

9 A. Yes.

10 Q. The first photograph, can you tell us what
11 the first photograph depicts?

12 A. The first photograph depicts the railroad
13 operations in the area of the proposed Mississippi
14 River bridge as of April 30, 1958.

15 Q. And I think just for orientation purposes,
16 the first photograph at the bottom left-hand corner
17 has a building with four cylinder structures on the
18 top of the building.

19 Is that a good way to orient
20 ourselves?

21 A. Yes.

22 Q. And do you know, on this photograph, have

1 you been able to determine where the proposed bridge
2 crosses?

3 A. Yes.

4 Q. Where does it cross on the photograph
5 that's the 1958 photograph?

6 A. It crosses at the S-curve just near the
7 round house that's about in the upper middle of the
8 photograph.

9 Q. And my finger, is it pointing correctly to
10 the S-curve that you refer to?

11 A. Just to the south; yeah, right there.

12 Q. I will mark -- why don't you mark it. Do
13 you have a pen?

14 A. I do not.

15 Q. Can you mark on Petitioner's Exhibit 48
16 approximately where the bridge crosses, the proposed
17 bridge?

18 And, Your Honor, if I can have your
19 exhibit, we'll have that marked as well.

20 JUDGE JACKSON: Sure. Please.

21 (Whereupon the witness made the
22 requested marking.)

1 MR. REDMOND: And can you mark these others?
2 (Whereupon the witness made the
3 requested marking.)
4 MS. LEMLEY: Your Honor, we would like to
5 request a clearer picture than what we have, and we
6 would like to have a marked copy for ourselves on the
7 locations that Ms. Lagemann is marking.
8 MR. REDMOND: Sure.
9 MS. LEMLEY: Thank you.
10 JUDGE JACKSON: I believe Mr. Redmond will
11 accommodate you for the record.
12 Q. BY MR. REDMOND: Have you marked on the
13 1958 photograph the approximate location of the
14 proposed Mississippi River bridge?
15 A. Yes.
16 Q. Is it a fair statement that there are
17 currently far fewer tracks, TRRA tracks there now
18 than there were depicted in the 1958 photograph?
19 A. Yes.
20 Q. How many tracks are there now?
21 A. Eight.
22 Q. Is there a round house now?

1 A. No.

2 Q. Now I would like to show you the next
3 picture which is a 1968 photograph marked
4 ASCSSK-333-111.

5 Are you familiar with this photograph?

6 A. Yes.

7 Q. And does it show the TRRA yard as it
8 appeared in 1968?

9 A. Yes.

10 Q. And would you be able to mark on this
11 photograph as well the proposed location of the
12 bridge?

13 (Whereupon the witness made the
14 requested marking.)

15 Q. And could you mark these others?

16 (Whereupon the witness made the
17 requested marking.)

18 Q. Now, what other photographs are located in
19 this exhibit?

20 A. There are two photographs dated July 16,
21 2009.

22 Q. And what do they depict?

1 A. They depict the TRRA Wiggins 2 yard but
2 you've got to put them together.

3 Q. Now, how do you put them together?

4 (Witness indicating.)

5 Q. So is the building with the four cylinders
6 to the south of the other photograph? The photograph
7 that's marked on the right-hand side, ST170, is the
8 southern end, and the photograph ST172 is the
9 northern end, is that correct?

10 A. Yes.

11 Q. Would it be a fair statement based upon
12 these photographs that the number of railroad tracks
13 at this particular yard has decreased significantly
14 since 1958?

15 A. Yes.

16 MR. REDMOND: Those are all the questions I
17 have.

18 JUDGE JACKSON: Counsel?

19 MS. LEMLEY: Can I have a brief moment, Your
20 Honor?

21 JUDGE JACKSON: Sure.

22 MR. REDMOND: Your Honor, I do have two more

1 questions if I can just ask them.

2 JUDGE JACKSON: Sure.

3 Q. BY MR. REDMOND: Ms. Lagemann, you did

4 provide testimony with respect to the various bridges

5 that you crossed?

6 A. Yes.

7 Q. That crossed TRRA tracks?

8 A. Yes.

9 Q. And one of those is the McKinley bridge, is

10 that correct?

11 A. Yes.

12 Q. Was the McKinley bridge rehabbed?

13 A. Yes.

14 Q. When was it rehabbed?

15 A. I believe it went to construction in 2005.

16 Q. And when it was rehabbed, was fencing put

17 up as part of the rehabilitation?

18 A. No.

19 Q. Does the McKinley bridge cross TRRA tracks?

20 A. Yes.

21 Q. Now, in your testimony with respect to your

22 trips across the TRRA tracks, were any of those

1 tracks underneath those bridges parts of switching
2 yards?

3 A. Yes.

4 Q. Can you recall what TRRA switching yards or
5 what bridges cross tracks that are TRRA switching
6 yards?

7 A. The Broadway Bridge crosses the north end
8 of their Madison hump yard, and the Poplar Street
9 Bridge crosses their Wiggins 5 yard which I believe
10 to be a storage yard.

11 Q. And when you say a hump yard, what do you
12 mean by a hump yard?

13 A. The hump yard is what the railroads use to
14 take trains apart and make new ones utilizing a hump,
15 you know, a vertical curb if you will to cut the
16 trains loose, and they go down the tracks and they
17 make new trains, and it's all controlled by people in
18 the tower.

19 MR. REDMOND: Those are all the questions I
20 have.

21 JUDGE JACKSON: All right.

22 (Pause)

1 JUDGE JACKSON: Did you want five minutes?

2 MS. LEMLEY: Yes, I would. Thank you.

3 JUDGE JACKSON: Sure. We'll take five minutes.

4 (Recess taken.)

5 MS. LEMLEY: Okay, Your Honor, I think we're

6 ready.

7 JUDGE JACKSON: All right. Cross-examination.

8 MS. LEMLEY: Good morning.

9 I'd like to ask you a few questions

10 about your testimony just a moment ago.

11 CROSS-EXAMINATION

12 BY MS. LEMLEY:

13 Q. You referred to Exhibit 33. Do you have

14 that in front of you still?

15 A. Yes.

16 Q. And that is the section on highway

17 lighting, and I believe you said it's from a

18 standards guide.

19 Can you relate to me again where this

20 section is from? It's two pages.

21 A. This is an excerpt from IDOT's Bureau of

22 Design & Environment Manual.

1 Q. How thick is the manual?

2 (Witness indicating.)

3 Q. And you just indicated how high?

4 A. Probably two feet when you put it all

5 together.

6 Q. So you're submitting what is two pages out

7 of it?

8 A. Yes.

9 Q. Are there any standards within that manual

10 specifically relating to overpasses over railroad

11 tracks?

12 A. I am not aware of any section specifically

13 related to that.

14 Q. How about generally related to that?

15 A. There may be several sheets that, you know,

16 depict our standard when we cross a railroad track,

17 but there wouldn't be an entire section or chapter.

18 Q. Is this your standard when you cross a

19 railroad track, Exhibit 33?

20 A. This is only in reference to highway

21 lighting.

22 Q. Is there a particular standard in the

1 two-foot high manual specifically relating to
2 overpasses that span work areas?

3 A. There is a general section in the Bureau of
4 Design & Environment Manual related to general
5 structures, but it does not go into a detailed
6 structural design.

7 Q. Can you elaborate on what you mean by that?

8 A. It is used more for planning purposes.

9 In the district, we do not have any
10 structural engineers that design bridges, so this
11 manual would be referenced for general locations of
12 span lengths to be used in more of a Phase I
13 capacity.

14 Q. Are there any standards regarding lighting
15 of overpasses spanning railroad tracks in the
16 two-foot high manual?

17 A. I am not aware of it.

18 Q. Are there any standards regarding lighting
19 of overpasses over work areas within that two-foot
20 high manual?

21 A. I am only aware of the highway lighting
22 section provided here.

1 Q. So the only section -- and that is
2 Exhibit 33 -- of that manual relating to lighting and
3 overpasses is this Exhibit 33?

4 A. That I can locate.

5 Q. Does it reference lighting of work areas
6 underneath an overpass?

7 A. No, it does not.

8 Q. Does it reference lighting of railroad
9 tracks under a railroad overpass?

10 A. No, it does not.

11 Q. I'll direct you to the second sentence of
12 the particular section that you submitted in
13 Exhibit 33 as 56-2.06. The second sentence states,
14 "Underpass lighting generally is installed to enhance
15 driver visibility after daylight hours."

16 Are we talking about driver visibility
17 in this matter?

18 A. Yes.

19 Q. We are talking about driver visibility?

20 A. In that sentence, yes.

21 Q. In this matter today, is driver visibility
22 an issue?

1 A. No.

2 Q. The second paragraph states, "On highways
3 that are not continuously lighted, consider providing
4 underpass lighting where frequent nighttime
5 pedestrian traffic exists."

6 Is that the situation that's present
7 today at this hearing?

8 A. No.

9 Q. We're talking today about what lighting is
10 required for the railroad yard, for workers on that
11 railroad yard, correct?

12 A. Yes.

13 Q. Can you tell us of any lighting on
14 overpasses which do not comply specifically with
15 Petitioner's Exhibit 33?

16 A. I am not aware of any.

17 Q. So as far as you know, every overpass in
18 the State of Illinois complies with this Exhibit 33?

19 A. I do not work in a position where I would
20 have that knowledge.

21 Q. You talked about the lighting and the span
22 length and, you know, some of that technical

1 information a minute ago, and your conclusion was
2 that Terminal Railroad had adequate daylight
3 lighting; correct?

4 A. Yes.

5 Q. Did you analyze the lighting after dark?

6 A. No.

7 Q. You discussed the maintenance of the
8 lighting and the difficulties associated with the
9 maintenance of the lighting.

10 A. Yes.

11 Q. Would it alleviate those concerns if
12 Terminal Railroad offered to maintain the lighting?

13 A. I believe that would eliminate the
14 maintenance concern, yes.

15 Q. Do you have before you exhibit L?

16 A. I do not.

17 Q. Let me hand it to you then.

18 I'm handing you what was marked as
19 Exhibit L, and if you turn to the second page I
20 believe in your testimony prior, you identified the
21 lighting that is attached to the underside of the
22 Jefferson Avenue overpass, correct?

1 A. Yes.

2 Q. And that overpass spans tracks that are
3 owned by Terminal Railroad, correct?

4 A. That is my understanding.

5 Q. You stated with respect to those lights
6 that it doesn't change your opinion regarding the
7 need for lighting because those lights are off in the
8 daytime.

9 Is that a fair statement of your
10 opinion?

11 A. Yes.

12 Q. Are those lights on at night, do you know?

13 A. I have no knowledge at this structure.

14 Q. And you have no opinion regarding the
15 nighttime illumination needs of the overpass at the
16 Wiggins Ferry yard?

17 A. I would refer back to our BDE manual where
18 it states that we would provide lighting if it was
19 continuously lit.

20 Q. Do you have before you Petitioner's Exhibit
21 No. 35?

22 A. Yes.

1 Q. Is this the -- can you repeat what you call
2 this?

3 A. The Bureau of Design & Environment Manual.

4 Q. BD&E is how you refer to it?

5 A. BDE.

6 Q. This manual, you pointed to the fact that
7 in Section 58-4.04(c) that it requires fencing on
8 pedestrian bridges. Is that --

9 A. I don't believe I made any previous
10 testimony to that section. That section is
11 specifically for pedestrian bridges.

12 Q. Okay. I'm sorry.

13 To what section did you direct your
14 testimony?

15 A. It was in reference to Section 58-4.04(a).

16 Q. And what portion of that section are you
17 relying upon in your opinion that lighting is not
18 necessary?

19 A. This is in regard to fencing.

20 Q. Did you submit a section of BDE regarding
21 lighting?

22 A. That was Exhibit 33.

1 Q. Okay. Well, let's talk about this
2 Exhibit 35 for a moment.

3 Do these standards relate to
4 overpasses over railway lines?

5 A. We believe this applies to all highway
6 overpasses.

7 Q. Does it specifically reference overpasses
8 over railway lines?

9 A. I believe it does not specifically mention
10 railroads.

11 Q. Does it mention overpasses over work areas?

12 A. It does not specifically mention work
13 areas.

14 Q. Are there sections of the BDE Manual that
15 relate to fencing on overpasses spanning railway
16 lines?

17 A. I am not aware of any.

18 Q. Are you aware of any sections in that
19 manual relating to fences on overpasses spanning work
20 areas?

21 A. I am not aware of that.

22 Q. So the totality of the information in the

1 two-foot high manual relating to fencing of highway
2 overpasses is the section that you directed us to in
3 your direct testimony?

4 A. Yes.

5 Q. You stated in connection with your
6 testimony regarding Exhibit 35 that the Illinois
7 Department of Transportation provides evaluation on
8 the need for fencing when it's requested.

9 Do you recall that?

10 A. We provided an evaluation based on the
11 criteria evaluated in the BDE Manual.

12 Q. Are you aware of any overpasses with
13 fencing that would not strictly comply with the
14 section of the BDE Manual?

15 A. I am not aware of any.

16 Q. You discussed during your direct testimony
17 eight bridges that you observed in the area crossing
18 Terminal Railroad tracks.

19 Let's start with the Poplar Street
20 bridge. That's the first one that you noted.

21 What was the year in which that bridge
22 was constructed?

1 A. I don't know for sure. I believe it was
2 sometime in the mid '60s.

3 Q. Has it been reconstructed since then?

4 A. There have been projects out there. I
5 don't know if it would classify as a reconstruction.

6 Q. Has the area spanning the Terminal Railroad
7 tracks been reconstructed?

8 A. I do not know that.

9 Q. And you stated that that crosses the
10 Wiggins 5 yard storage area?

11 A. Yes.

12 Q. Did you observe whether or not there are
13 any workmen on the ground under the Poplar Street
14 overpass?

15 A. I did not.

16 Q. Are you aware of the activities of Terminal
17 Railroad on the ground under that portion of the
18 overpass?

19 A. No.

20 Q. Did you observe or look to observe any
21 debris on the ground from the highway above?

22 A. I did not go to the ground.

1 Q. How did you observe this area?

2 A. I drove over the Poplar Street bridge.

3 Q. You were driving at a good clip on the

4 highway?

5 A. At the speed limit.

6 Q. And you said no fencing. That's all you

7 testified to so that's all you did?

8 A. Yes.

9 Q. The second one that you talked about was

10 the McKinley bridge?

11 A. Yes.

12 Q. And you said that it was reconstructed in

13 2005?

14 A. I believe it was 2005.

15 Q. Are you aware of the Terminal Railroad

16 operations under that portion of the overpass that

17 span the Terminal Railroad tracks?

18 A. I have witnessed trains on those tracks.

19 Q. Do you know what type of operation it is?

20 A. It appeared to be through trains.

21 Q. Did you observe the ground level for debris

22 falling off of that highway overpass onto the

1 Terminal Railroad property beneath?

2 A. I did not look for that. I did not go
3 beneath in my recent drivethrough.

4 Q. You had talked about the Eads Bridge. How
5 old is the Eads Bridge?

6 A. Again, I do not know for sure. I believe
7 it was constructed in the late 1800s.

8 Q. Has it been reconstructed?

9 A. I believe the city did have a project maybe
10 in the late '90s. Once again, I'm not familiar with
11 that though.

12 Q. Was it a reconstruction, do you know?

13 A. I'm not for sure.

14 Q. And where are the Terminal tracks under the
15 Eads Bridge? Where are those located?

16 A. I believe they call it the Front Street
17 tracks.

18 Q. On the Missouri side.

19 A. On the Illinois side.

20 Q. On the Illinois side.

21 What are the Terminal Railroad's
22 operations under that portion of the overpass?

1 A. I do not know for sure. I have seen parked
2 trains.

3 Q. Did you observe the ground level for debris
4 falling off of the Eads Bridge onto Terminal
5 Railroad's property?

6 A. I did not look.

7 Q. Do you know backing up to the McKinley
8 Bridge whether or not Terminal Railroad has workmen
9 on the ground at those tracks underneath the McKinley
10 bridge overpass?

11 A. I do not know.

12 Q. With regard to the Eads Bridge, do you know
13 if Terminal Railroad has workmen on the ground in
14 that area under the overpass?

15 A. I'm not aware of their operations.

16 Q. The next one you talked about was the
17 Martin Luther King Bridge.

18 How old is that bridge?

19 A. I really have no idea on that one.

20 Q. Would you say more than 20 years?

21 A. Yes.

22 Q. What operations of the Terminal Railroad

1 fall under the overpass associated with the McKinley
2 Bridge?

3 A. It has the same -- oh, I'm sorry. McKinley
4 Bridge?

5 Q. I'm sorry. The Martin Luther King Bridge.

6 A. The Martin Luther King compared to which
7 bridge? I'm sorry.

8 Q. What is your understanding of Terminal
9 Railroad's operations under the overpass associated
10 with the MLK Bridge?

11 A. It would be the same as the Eads Bridge.

12 Q. Can you elaborate on what your
13 understanding is?

14 A. I believe there's two tracks that they call
15 their Front Street tracks.

16 Q. What is your understanding of their
17 operations there?

18 A. Like I say, I have seen parked trains in
19 the area but I am not familiar with the operations.

20 Q. Do you know whether or not Terminal
21 Railroad has workmen on the ground underneath that
22 railroad overpass?

1 A. I do not know.

2 Q. Did you observe debris on the property from
3 the Martin Luther King Bridge overpass?

4 A. I did not look underneath.

5 Q. The next one you discussed was the
6 I-55/I-70 bridge.

7 Can you describe in particular where
8 that is? I'm not familiar with that.

9 A. It's the structure just west of Gateway
10 International Raceway, and it would be east of
11 Exchange Avenue.

12 Q. How old is that overpass?

13 A. Once again, I would speculate that it was
14 probably built in maybe the late '50s or early '60s.

15 Q. What is your understanding of Terminal
16 Railroad's operations under that overpass?

17 A. I believe they have two tracks.

18 Q. Do you know how they use those tracks?

19 A. I do not.

20 Q. Do you know whether or not they have
21 workmen under that overpass?

22 A. I do not know.

1 Q. Did you observe any debris from the highway
2 on the ground level underneath that overpass?

3 A. I did not go beneath it.

4 Q. Has that structure been reconstructed
5 recently or since its construction?

6 A. I'm not aware of that. I wouldn't have
7 knowledge of that.

8 Q. You discussed the I-64 overpass between
9 20th and 25th Street.

10 Can you describe more particularly
11 where that is?

12 A. That is in the City of East St. Louis.

13 Q. How old is that overpass?

14 A. Once again, I would speculate it was
15 constructed in the '60s or possibly early '70s.

16 Q. Has it been reconstructed since?

17 A. I do not know.

18 Q. Do you have any understanding of Terminal
19 Railroad's operations underneath that structure?

20 A. I believe they have two tracks.

21 Q. Do you know how they use those tracks?

22 A. I do not.

1 Q. Do you know if they have workers on the
2 ground underneath that overpass?

3 A. No.

4 Q. Did you observe any debris on the ground
5 underneath that overpass?

6 A. I did not go beneath.

7 Q. The Broadway Bridge you discussed, you said
8 it's at the north end of the Madison hump yard, and
9 that's owned by Terminal Railroad?

10 A. Yes. That's my understanding.

11 Q. What is your understanding of Terminal
12 Railroad's operations underneath that overpass?

13 A. I believe trains come off of the Merchants
14 Bridge and cross underneath the Broadway Bridge to
15 enter the yard from the north.

16 Q. So the trains enter the yard from the
17 north, correct, and they leave --

18 A. And I would assume they leave that way
19 also.

20 Q. And they go north.

21 And this overpass is in the north end
22 of the hump yard, correct?

1 A. I would call it the north end of the hump
2 yard, yes.

3 Q. Which is the entrance and exit area of the
4 trains?

5 A. Yes.

6 Q. Do you know whether or not Terminal
7 Railroad has workers on the ground underneath that
8 overpass?

9 A. I do not know for sure.

10 Q. Did you observe any debris on the ground
11 underneath that overpass?

12 A. I did not go underneath.

13 Q. Finally, the 19th Street, well, let's back
14 up.

15 The Broadway Bridge, do you know when
16 that was constructed?

17 A. I believe that is a city street, and I do
18 not know.

19 Q. Are any of the other bridges that we talked
20 about city streets versus interstate crossings?

21 A. The Eads Bridge I believe is owned by the
22 City of St. Louis, so I guess I would classify that

1 as a city street.

2 The Martin Luther King Bridge is not
3 an interstate, and McKinley Bridge is not an
4 interstate.

5 Q. The 19th Street bridge in Granite City, is
6 that a city street?

7 A. I believe it is.

8 Q. Do you know how old that overpass is?

9 A. I don't know.

10 Q. Do you know what Terminal Railroad's
11 operations are under that overpass?

12 A. No, I do not.

13 Q. Did you observe any workers on the ground
14 under that overpass?

15 A. I did not go beneath.

16 Q. Did you observe any debris under there?

17 A. I did not go beneath.

18 Q. Do you still have before you what was
19 marked as Petitioner's Exhibit 40?

20 A. I do.

21 Q. You testified that this was correspondence
22 to the Illinois Department of Transportation

1 regarding the Missouri River bridge project, correct?

2 A. It was ultimately provided to IDOT, yes.

3 Q. And you specifically referred in your
4 testimony to the October 18, 2002 letter which is on
5 page 3 of the exhibit?

6 A. Yes.

7 Q. What is the date of that letter?

8 A. October 18, 2002.

9 Q. So that was a number of years ago?

10 A. Yes.

11 Q. Let's talk about what has happened since
12 October 18 of 2002.

13 How many revisions to the design of
14 the Mississippi River bridge were made between
15 October 18, 2002 and present?

16 A. In 2002, the design would have been for the
17 eight-lane structure, and now we have gone to a
18 four-lane structure, so there was one change
19 recently.

20 Q. How many different design drawings did you
21 provide to Terminal Railroad for their approval after
22 2002?

1 A. I do not have that information.

2 Q. Would you say more than two?

3 A. I really couldn't say. I was not in the

4 river bridge squad at that time.

5 Q. When did you become part of the river

6 bridge squad?

7 A. In February of 2008.

8 Q. So you were not with the Illinois

9 Department of Transportation regarding the Missouri

10 River bridge when this letter arrived? And by this

11 letter, I mean the October 18, 2002 letter.

12 A. That's correct.

13 Q. So you're not privy to any of the

14 discussions regarding the comments in the letter?

15 A. No.

16 Q. Are you privy to the reasoning of Terminal

17 Railroad with regard to its position stated in that

18 letter?

19 A. I was not involved in those discussions.

20 Q. Are you aware of what the railroad

21 guidelines were as of October 18, 2002?

22 A. No, I'm not.

1 Q. So you can testify to changes in design
2 after you became part of the group in 2008?

3 A. 2008.

4 Q. And can you testify to what happened
5 design-wise from 2002 forward?

6 A. No.

7 Q. You would agree that Terminal Railroad
8 wasn't presented with the final design drawing for
9 the bridge prior to the October 18, 2002 letter?
10 Wouldn't you agree?

11 A. I do not know exactly what was provided.
12 The letter references TS&Ls.

13 Q. When was the last version of TS&Ls sent to
14 Terminal Railroad with regard to the Mississippi
15 River bridge, the most recent?

16 A. The most recent? That would have been
17 provided by the Missouri Department of Transportation
18 I believe March of this year.

19 Q. Of 2009?

20 A. 2009.

21 Q. Do you still have before you what was
22 marked as Petitioner's Exhibit 13?

1 A. I do not.

2 Q. Let me hand you a copy.

3 Exhibit 13 is a letter dated
4 February 13, 2009, correct?

5 A. Yes.

6 Q. Were you with the Mississippi River bridge
7 group at that point?

8 A. Yes, I was.

9 Q. This letter is in response to the TS&Ls
10 sent to Terminal Railroad in January of 2009,
11 correct?

12 A. Yes.

13 Q. Are you aware of the railroad standards in
14 effect as of the date of the February 13, 2009
15 letter?

16 A. I have seen copies. I would not say I'm
17 familiar with them, no.

18 Q. You talked about the original design
19 indicating eight lanes and it changing to a four-lane
20 structure.

21 Are there plans currently for
22 additional lanes being added sometime in the future?

1 A. The bridges as designed could be re-striped
2 to provide six lanes.

3 Q. The space provided for the re-striping
4 would relate to this ten-foot shoulder that's on the
5 design currently, correct?

6 A. That area would be utilized.

7 Q. Would there be pedestrians ever on the
8 overpass?

9 A. No.

10 Q. What about cars parked on the shoulder?

11 A. I would assume that could be a case of an
12 emergency.

13 Q. Have you ever been involved with the design
14 of any other overpasses that span railroad property
15 other than the Mississippi River bridge project?

16 A. Not the design.

17 Q. Have you ever made a decision regarding
18 fencing of an overpass over a railroad yard?

19 A. I have never made those decisions.

20 Q. Have you ever made a decision regarding
21 lighting of an overpass spanning a railroad yard?

22 A. No.

1 Q. So it would suffice it to say that this is
2 your first experience with those issues? And I'm
3 meaning by "this" the Missouri River bridge. Your
4 experience with the Missouri River bridge is your
5 first experience with lighting and fencing of
6 overpasses spanning railroad yards?

7 A. The Mississippi River Bridge, yes.

8 Q. I would like to show you what is marked as
9 Petitioner's Exhibit 48.

10 And I'm wondering if I could obtain a
11 good copy of that, another copy that I could give to
12 the witness?

13 MS. WESTAPHER: Sure.

14 MS. LEMLEY: Do you have a copy with you?

15 THE WITNESS: I do not.

16 MS. WESTAPHER: I have one that has her
17 markings on it.

18 MS. LEMLEY: Thank you.

19 Q. I'm handing you what was marked as
20 Petitioner's Exhibit 74.

21 If you would turn to the last two
22 pages of the exhibit which you testified is a photo

1 taken as of July 16, 2009?

2 A. Yes.

3 Q. Are you familiar on this picture of which

4 lines are Terminal Railroad's and which lines are the

5 other railroads?

6 A. Yes.

7 Q. Can you tell me what the operations are of

8 the Kansas City Southern Railroad shown in this

9 picture?

10 A. I believe they have two tracks that they

11 use for storage and one track that comes down to the

12 jug handle to go east. That's my understanding.

13 Q. On what do you base this understanding?

14 A. Just previous conversations with the Kansas

15 City Southern for the Route 3 project.

16 Q. Does the Kansas City Southern have workmen

17 on the ground in that area under the proposed

18 overpass area?

19 A. I do not know.

20 Q. The Union Pacific operations on Exhibit 74,

21 are you familiar with the Union Pacific's operations

22 at that location?

1 A. I am not familiar with them.

2 Q. Have you ever observed Union Pacific
3 workmen on the ground during your visits to that
4 property?

5 A. I do not recall seeing any workers.

6 Q. The Norfolk Southern operations, are you
7 familiar with their operations near the Terminal
8 Railroad's property?

9 A. I'm not familiar with their operations.

10 Q. You testified that in connection with
11 lighting requests from other railroads that the KCS
12 opined that lighting would be an attractive nuisance.
13 Do you recall testifying to that?

14 A. I'm not sure what opined means.

15 Q. You stated that someone at the KCS Railroad
16 stated that lighting underneath the overpass would be
17 an attractive nuisance.

18 A. Yes.

19 Q. Was that conveyed to you personally?

20 A. No, it was not.

21 Q. Who was it conveyed to?

22 A. I believe it was an e-mail from the Kansas

1 City Southern to Greg Horn.

2 Q. Did you have any discussions with anyone
3 from the Kansas City Southern regarding lighting
4 being an attractive nuisance over their tracks?

5 A. I did not.

6 Q. Can you tell me the date of that e-mail
7 transmission?

8 A. I do not recall.

9 MS. LEMLEY: One moment, Your Honor.

10 JUDGE JACKSON: Sure.

11 (Pause)

12 Q. BY MS. LEMLEY: Ms. Lagemann, do you
13 consider yourself to be an expert in lighting?

14 A. No.

15 Q. Do you consider yourself to be an expert in
16 the lighting of railroad operations?

17 A. No.

18 Q. Do you consider yourself to be an expert in
19 lighting of workplace operations?

20 A. No.

21 Q. And that includes outdoor workplace
22 operations?

1 A. No.

2 Q. Do you consider yourself an expert in
3 fencing on overpasses over railroad yards?

4 A. Not an expert, no.

5 Q. Do you consider yourself an expert in
6 fencing over outdoor workplaces?

7 A. No.

8 MS. LEMLEY: That's all we have. Thank you
9 very much.

10 JUDGE JACKSON: Thank you.

11 Mr. Blair?

12 MR. BLAIR: Thank you.

13 CROSS-EXAMINATION

14 BY MR. BLAIR:

15 Q. Ms. Lagemann, regarding your testimony, in
16 Illinois, based on your understanding of the Illinois
17 Department of Transportation's guidelines and design
18 standards, is fencing used on interstate bridges?

19 A. No.

20 Q. Anywhere?

21 A. Not that I'm aware, no.

22 Q. I know you're familiar with District 8, but

1 regarding statewide, have you had conversations with
2 other districts regarding this subject?

3 A. No, I haven't.

4 Q. With regards to pedestrian traffic
5 underneath interstate bridges, are you familiar with
6 areas that that exists?

7 A. I'm sure there are locations where
8 pedestrians do exist. I cannot think of any off the
9 top of my head where I would consider high volume
10 pedestrian generators like what exists in St. Louis.

11 Q. Okay. With regards to the 32-inch versus
12 42-inch barrier walls, do you have any knowledge of
13 that?

14 A. As far as the upgrade from 32 to 42?

15 Q. Yes.

16 A. Yes.

17 Q. How common is it to increase the vertical
18 length to 42 inches?

19 A. I am not familiar with how common it would
20 be.

21 Q. Are you aware of anywhere other than this
22 design?

1 A. I am not.

2 Q. So all other interstate bridges that you
3 are aware of have 32 inch?

4 A. I am not aware of height on the other
5 interstates.

6 Q. Are you aware of the ten-foot shoulders on
7 the proposed design? You're aware of that dimension?

8 A. Yes.

9 Q. The bridges that you testified to, the Eads
10 and the Martin Luther King, McKinley, those bridges,
11 do you know what the shoulder width was on any of
12 those?

13 A. For Martin Luther King -- I don't know the
14 exact dimensions for any of those. I do not believe
15 Martin Luther king has any shoulders. McKinley may
16 have a small shoulder. I'm not aware of the
17 dimension.

18 Q. Were any of the bridges that you went over,
19 did any of them have at least ten foot of shoulder
20 width?

21 A. The Interstate 55-70 and Interstate 64
22 bridges may have ten-foot shoulders, but I am not

1 positive on the dimension.

2 Q. The non-interstate bridges, would they have
3 less than ten feet shoulders then?

4 A. The city streets, you know, the Broadway
5 for example, just kind of seem to be, you know, wide
6 lanes if you will.

7 I'm not aware of how wide the
8 shoulders were.

9 Q. Okay. Does the width of the shoulder have
10 an impact on debris? In other words, if you have a
11 shoulder width of five feet versus a shoulder width
12 of ten feet, would you expect more or less debris
13 flying over the bridge?

14 A. I would expect less debris to go over a
15 taller parapet.

16 Q. What about the shoulder width of ten feet?

17 A. Yeah. I'm sorry. The shoulder width,
18 yeah, I would think the more shoulder you have, the
19 more room it would have to catch the debris on the
20 shoulder than to make it over.

21 Q. I assume you don't know anything about wind
22 loading, do you?

1 A. I do not.

2 Q. With regards to lighting, as a practicing
3 engineer, do you agree with Mr. Horn's testimony that
4 based on the vertical design distance and the
5 horizontal distance between the piers that there
6 won't be a tunnel effect and there will be sufficient
7 daylight lighting?

8 A. I agree.

9 Q. Do you think there's a need for light at
10 this location?

11 A. My opinion is there is not given that there
12 is not lighting at the location of the bridge today
13 in the yard.

14 MR. BLAIR: Okay. Thank you.

15 JUDGE JACKSON: Thank you.

16 Mr. Redmond, redirect?

17 MR. REDMOND: Yes.

18 REDIRECT EXAMINATION

19 BY MR. REDMOND:

20 Q. Ms. Lagemann, you were just asked a
21 question about lighting.

22 This is called the Wiggins Ferry #2

1 yard, is that correct?

2 A. Yes.

3 Q. Is this a continuously lit yard?

4 A. No.

5 Q. Why is it not a continuously lit yard?

6 A. I don't know.

7 Q. Well, what is a continuously lit yard?

8 A. It would be lighting all the way up and

9 down the entire length of the yard.

10 Q. Does this yard have lighting all the way up

11 and down the entire length of the yard?

12 A. No.

13 Q. So would it be fair to say that this is not

14 a continuously lit yard?

15 A. Yes.

16 Q. If it were a continuously lit yard, is it

17 your testimony that IDOT would reconsider this

18 request for lighting under the proposed bridge?

19 A. Yes.

20 Q. Why is that?

21 A. Following our own standards of highway, if

22 lighting was continuously provided, we would

1 accommodate that under the bridge.

2 Q. And now, you were asked questions on
3 cross-examination about your reference to the IDOT
4 manual, specifically lighting under bridges that
5 cross highways, and a point was made that there was
6 no specification for bridges that cross railroad
7 tracks.

8 In your professional judgment, do more
9 people go under, do more people traverse a highway
10 than possible workers cross under a bridge where
11 there's a railroad underneath?

12 MS. LEMLEY: I'll object to that question. I
13 think he's drawing a line between car traffic and
14 people traffic, and I'd like to make that
15 distinction.

16 If you'd rephrase.

17 MR. REDMOND: Well, only as a basis for an
18 objection.

19 JUDGE JACKSON: I need the question back.

20 MR. REDMOND: I'll rephrase it, Judge, if I
21 can.

22 JUDGE JACKSON: Okay. He'll rephrase it.

1 Q. BY MR. REDMOND: The IDOT manual speaks of
2 bridges over highways, is that correct?

3 A. Yes.

4 Q. That portion that you referred to in
5 connection with lighting, is that correct?

6 A. Yes.

7 Q. Now, in your professional judgment, are
8 there more people that pass on a highway underneath a
9 bridge than would pass on railroad tracks underneath
10 a bridge?

11 A. I would think so, yes.

12 Q. Substantially more, correct? Is that
13 correct?

14 A. Yes.

15 Q. And if there were hazards from things
16 coming off a bridge, then is it your professional
17 judgment that those hazards could affect car traffic
18 underneath a bridge?

19 A. Yes.

20 Q. So are there parallels between the
21 considerations given to lighting over a highway on a
22 bridge and considerations given to lighting over

1 railroad tracks underneath a bridge?

2 A. I believe there will be parallels, yes.

3 Q. You were also asked questions about the
4 history of the Mississippi River bridge project since
5 October 18th of 2002.

6 Is it your understanding that the
7 proposed Mississippi River bridge has always been a
8 bridge to accommodate an interstate highway?

9 A. Yes.

10 Q. In fact, that's the whole reason for it is
11 to take I-70 away from downtown St. Louis and to put
12 it on the Illinois side, is that correct?

13 A. Yes.

14 Q. And has that been the reason for the
15 project since the start to the best of your
16 knowledge?

17 A. Yes.

18 Q. Finally, you were asked questions about the
19 current plans for the Mississippi River bridge.

20 Is it your understanding that the
21 current plans of the Mississippi River bridge depict
22 a ten-foot wide shoulder on either side of the lanes

1 of traffic, on the outside of the lanes of traffic?

2 A. Yes.

3 MR. REDMOND: Those are all the questions I

4 have.

5 JUDGE JACKSON: Ms. Lemley, any recross?

6 MS. LEMLEY: Yes, Your Honor, I do have a few

7 questions.

8 JUDGE JACKSON: We'll go around one more time.

9 Go ahead.

10 RECROSS-EXAMINATION

11 BY MS. LEMLEY:

12 Q. Ms. Lagemann, you talked about the ten-foot

13 shoulder now.

14 The shoulder is inside the barrier

15 rail, correct?

16 A. Yes.

17 Q. And the reason for the ten-foot shoulder

18 is, like we discussed a moment ago, it allows room

19 for expansion for re-striping in additional lanes,

20 correct?

21 A. That's not the reason for providing the

22 shoulder initially.

1 Q. What is the reason for providing the
2 shoulder?

3 A. All interstates have shoulders for safety.

4 Q. The ten-foot shoulder, is the ten-foot
5 shoulder provided for safety for cars let's say with
6 a flat tire to pull over?

7 A. It could be used for that.

8 Q. What other uses will the ten-foot shoulder
9 be used or be put to?

10 A. It could be used for avoidance maneuvers,
11 something in the roadway that the car would need to
12 avoid. They could utilize some of that area to
13 safely get around it.

14 Q. And also it allows space for re-striping an
15 additional lane, correct?

16 A. It will.

17 Q. You testified to your opinion that lighting
18 is not needed at the Terminal Railroad Wiggins Ferry
19 yard.

20 Have you ever visited the yard at
21 night?

22 A. Not at night.

1 Q. So you can't say what light is at that
2 particular location where the overpass will travel
3 across the yard?

4 A. I do not recall seeing any overhead
5 lighting in that area.

6 Q. You testified about more people passing
7 under an overpass on a highway versus pedestrians.

8 People passing under a highway
9 overpass on the highway would be in their cars,
10 correct?

11 A. They could also be bicyclists and
12 pedestrians.

13 Q. So if they're traveling, car or bike, where
14 would their eyes be focused?

15 A. Well, typically straight ahead. Some
16 cyclists look down for road hazards such as grades
17 and other objects.

18 Q. Are you familiar with what the workers do
19 on the Terminal Railroad yard?

20 A. I'm not familiar.

21 Q. So you can't state where the workers' eyes
22 would be directed during their work shifts on the

1 ground?

2 A. No.

3 Q. On what do you base your opinion that there
4 are parallels between the overpasses specifically
5 dealt with in the BDE Manual and the overpass over a
6 rail yard?

7 A. Both would involve the movement of vehicles
8 underneath the bridge for a highway. There would be
9 pedestrians in most situations. In the rail yard
10 there could be workers, so there could be people on
11 foot in both situations.

12 Q. So there could be people on foot in both
13 situations; that's the parallel you're drawing?

14 A. Yes.

15 Q. To the extent that the overpass structure
16 spanning the Terminal Railroad yard is re-striped for
17 an additional lane, what would the shoulder width be
18 in that circumstance?

19 A. I believe it would be two feet.

20 MS. LEMLEY: That's all the questions I have.

21 Thank you.

22 JUDGE JACKSON: Mr. Blair, last chance.

1 MR. BLAIR: Just a follow-up.

2 RECROSS-EXAMINATION

3 BY MR. BLAIR:

4 Q. What would be two feet?

5 A. Should the bridge be re-striped for three
6 lanes in the future, the shoulder would be two feet.

7 Q. Is there any plans of that that you're
8 aware of?

9 A. At this time there is not. It would be
10 dependent upon traffic volumes warranting and
11 available funding to widen the remaining portion of
12 the interstate.

13 MR. BLAIR: Okay. That's all I have.

14 JUDGE JACKSON: Counselor, one more shot.

15 MR. REDMOND: No thank you.

16 JUDGE JACKSON: Okay. Thank you.

17 All right. Thank you, Ms. Lagemann.

18 (Witness excused.)

19 JUDGE JACKSON: I think we should be at a good
20 place to stop.

21 MR. REDMOND: Yes. We have one more witness,
22 and I understand TRRA has two.

1 JUDGE JACKSON: Yes, and you don't need to tell
2 me how long because I'm going to give you as long as
3 you need anyway.

4 All right. Let's come back at a
5 quarter of 2; let's say a little over an hour we'll
6 come back.

7 (Whereupon the lunch recess was
8 taken from 12:45 p.m. to 1:45
9 p.m.)

10

11 AFTERNOON SESSION

12 JUDGE JACKSON: All right. Mr. Redmond, I
13 believe you have a third witness.

14 MR. REDMOND: We do, Your Honor.

15 JUDGE JACKSON: Please.

16 And you've been sworn?

17 MR. ANDERSON: No, I have not.

18 JUDGE JACKSON: Oh, you have not.

19 Could you please raise your right
20 hand?

21 (Whereupon the witness was sworn
22 by Judge Jackson.)

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RALPH ANDERSON

called as a witness herein, on behalf of Petitioner,
having been first duly sworn on his oath, was
examined and testified as follows:

DIRECT EXAMINATION

BY MR. REYNOLD:

Q. Would you please state your name and spell
your last name?

A. Ralph Anderson (A-n-d-e-r-s-o-n).

Q. Mr. Anderson, by whom are you employed?

A. Illinois Department of Transportation.

Q. What position do you hold at the
Department?

A. I am the engineer of bridges and
structures.

Q. What is the engineer of bridges and
structures, what position is that?

A. It deals with the planning, design,
construction, inspection load rating, hydraulics,
foundations, almost everything in design of a bridge
and its existence in the inventory is pretty much my
staff's, my and my staff's assignment.

1 Q. So does IDOT have in a sense a bridge
2 section within IDOT?

3 A. Correct.

4 Q. And are you the head of the bridge section?

5 A. Yes, I am.

6 Q. And is your formal title bureau chief of
7 bridges and structures?

8 A. Yes.

9 Q. How long have you held this position?

10 A. I have had that position since December of
11 1989.

12 Q. What is your educational background?

13 A. Bachelor of Science, University of
14 Illinois, Urbana-Champaign.

15 Q. What year?

16 A. In '77.

17 Q. And do you hold any professional licenses?

18 A. Yes. I'm a registered professional
19 engineer in Illinois and also structural engineer in
20 Illinois.

21 Q. Have you worked for the department since
22 you graduated from school?

1 A. Yes, I have.

2 Q. And would it be fair to say you worked your
3 way up to your present position?

4 A. Yes, that's correct.

5 Q. How many people are in your department?

6 A. Currently the bridge office has
7 approximately 85 staff.

8 Q. And are you a member of any associations
9 that are concerned with the construction of bridges?

10 A. As the bridge engineer as it's referred to,
11 I am the sole voting member for the AASHTO
12 subcommittee on bridges and structures to represent
13 Illinois.

14 Q. Okay. Now, you've referred to the AASHTO
15 subcommittee on bridges and structures, is that
16 correct?

17 A. Yes.

18 Q. Is AASHTO an acronym?

19 A. Yes, it is.

20 Q. What does it stand for?

21 A. American Association of State Highway
22 Transportation Officials.

1 Q. And what is the subcommittee that you are
2 on?

3 A. It's the subcommittee on bridges and
4 structures.

5 Q. What do you do on that subcommittee?

6 A. I serve several technical committees.
7 There currently are I believe 20, and you can serve
8 on a maximum of four, and I do serve on four.

9 Q. What four do you serve on right now?

10 A. They're referred to as Ts. T-2 is
11 bearings. T-3 is seismic loads. T-14 is steel
12 bridges, and T-18 is like load ratings of structures.

13 Q. And in the past, have you been a member of
14 other committees?

15 A. Yes. There has been several opportunities
16 over that approximately 20 years time that I have
17 served on a variety of extra committees and
18 assignments given to me.

19 Q. And have you had the opportunity to, in
20 fact, go overseas as a part of your membership in
21 AASHTO?

22 A. Yes.

1 On two occasions I was asked by FHWA
2 to represent the state DOTs AASHTO on two occasions,
3 and I was fortunate enough to visit I believe Japan,
4 South Korea, Taiwan, Italy, Germany and Great
5 Britain.

6 Q. And what did you do on those visits?

7 A. There were various assignments. We were
8 instructed to discuss with those countries their ways
9 of dealing with bridge issues, and we gathered
10 information. We gave reports.

11 Part of my assignment was to convey
12 the United States way of doing business, and then we
13 also did many seminars and follow-up educational
14 opportunities here in the United States.

15 Q. Now, going back to your licenses, are you a
16 licensed structural engineer?

17 A. That is correct.

18 Q. Are you also a licensed professional
19 engineer?

20 A. Yes.

21 Q. Now, at our request, did you undertake or
22 have your staff undertake an analysis of interstate

1 bridges crossing railroad operations in Illinois?

2 A. Yes.

3 Q. And is there a database that you were able
4 to access to do that?

5 A. Yes. We have a database similar to
6 MoDOT's -- every state has one -- where you have
7 inventory information gathered on every structure in
8 the state.

9 Q. Is this information gathered by Department
10 employees under your supervision?

11 A. Some are under my supervision. Many are
12 under the district or under local owners. Illinois
13 has 26,000 bridges, so many are under different
14 jurisdictions, but that database is the
15 responsibility of the state to report to FHWA every
16 year.

17 Q. So are there federal requirements that
18 required Illinois, like other states, to keep a
19 database of information concerning bridges?

20 A. That is correct.

21 Q. And do you comply with those requirements?

22 A. Yes, we do.

1 Q. Do you do this in the normal and ordinary
2 course of business of the Department of
3 Transportation?

4 A. Yes. It's part of our assignment.

5 Q. And did we ask you to make an inquiry into
6 the database of interstate bridges crossing railroads
7 in the State of Illinois?

8 A. Yes, I was asked.

9 Q. Did you do that?

10 A. Yes, we did.

11 Q. I would like to show you what has been
12 marked and previously tendered as Petitioner's
13 Exhibit 41 and ask you if you recognize this
14 document?

15 A. Yes, I do.

16 Q. Would you tell the court what it is or the
17 hearing officer what it is?

18 A. It is an inquiry into the database to see
19 how many structures, interstate structures in
20 Illinois cross some type of railroad.

21 Q. By interstate structures, are you referring
22 to bridges that carry an interstate?

1 A. Correct.

2 Q. How many interstate structures cross
3 railroads in Illinois?

4 A. There are currently 423 crossings.

5 Q. Do any of those crossings to the best of
6 your knowledge have fencing on them?

7 A. No; to the best of my knowledge, they do
8 not.

9 Q. Did you ask your staff to make a random
10 check to ensure that this was the case?

11 A. Yes.

12 Q. What did they do?

13 A. They took a look at approximately 150
14 actual structures. They went out and took a look to
15 see what the photographs were. The database includes
16 photos, so it takes an effort to get to those points,
17 but on every one of those 150, they did not find a
18 fence.

19 Q. Does Illinois permit pedestrians or
20 bicyclists on its interstate highways?

21 A. No, they do not.

22 Q. And is that as a result of a statute 625

1 ILCS 5/11-711?

2 A. Yes.

3 Q. And does Illinois, pursuant to that

4 statute, post signs on entrances to interstates

5 saying no pedestrian or bicycle traffic allowed?

6 A. Yes, they do.

7 Q. Now, I would like to draw your attention to

8 a document that TRRA has identified as Exhibit D as

9 in David, and this is a February 21, 2001 memorandum

10 from the U.S. Department of Transportation to

11 Division Administrators.

12 Are you familiar with this document?

13 A. Yes, I am.

14 Q. And who is the author of the document?

15 A. The author of the document is James Cooper

16 from the FHWA.

17 Q. Did you know Mr. Cooper?

18 A. Yes, I did.

19 Q. Is he still alive?

20 A. No; unfortunately he's deceased.

21 Q. Now, how, in your experience, has IDOT

22 interpreted this letter?

1 A. Our understanding of the meaning of the
2 letter is to refer to the Code of Federal Regulations
3 in various places, and it's an attempt to try to
4 bring a policy from the FHWA to the assistants to the
5 state bridge engineers or to the DOTs.

6 Q. Now, since that letter was written in the
7 year 2001, has IDOT constructed interstate bridges
8 over railroad tracks?

9 A. Yes, they have.

10 Q. Did you make a determination of how many
11 interstate bridges over railroad tracks have been
12 constructed by IDOT since Exhibit D was written in
13 2001?

14 A. Yes.

15 Q. How many?

16 A. There were seven individual structures.

17 Q. Were all these structures approved by the
18 FHWA?

19 A. The normal process of FHWA is to get
20 involved with interstates, so, yes, they were
21 approved by FHWA.

22 Q. Do any of these interstate structures built

1 since 2001 over railroad tracks have fences on them?

2 A. No, they do not.

3 Q. Did you ask your staff to photograph some

4 of these structures built since 2001 over railroad

5 tracks?

6 A. Yes, I do have photos that I'm aware of.

7 Q. I'd like to show you what we've marked as

8 Petitioner's Exhibit 42 and ask you if you recognize

9 this document?

10 A. Yes, I do.

11 Q. Would you tell His Honor what it is?

12 A. These are photos of the structures that

13 have been built since 2001 that have interstate

14 structures on Illinois highways that go over

15 railroads.

16 Q. Okay. And again, let's just go through

17 these photos in series.

18 What is the first one?

19 A. Okay. This one, I-74, is over the LA and

20 TP&W Railroad. It's near East Peoria.

21 Q. Was that bridge built in 2006?

22 A. Yes, 2006.

1 Q. What is the second one?

2 A. The second one is a combination of I-70 and
3 57 near Effingham over U.S. 40 and the CSXT Railroad.
4 They were built in 2006.

5 Q. What's the third one?

6 A. I-70 over Illinois 140 and the CSXT
7 Railroad built in 2005. This is in Fayette County.

8 Q. And what's the last one?

9 A. I-90 skyway over the Dan Ryan, and I
10 believe that is the Metra below and built in 2004.

11 Q. Okay. I think since I'm from that area,
12 it's the probably the el, the CTA.

13 A. Okay.

14 Q. Now, Exhibit D, going back to this 2000
15 letter, refers to a provision in the Code of Federal
16 Regulations identified as 23 CFR 646.214 which has
17 been marked as Exhibit H by the defendants, and I
18 want to show that to you.

19 Are you familiar with this?

20 A. Yes, I am.

21 Q. And this letter deals with two particular
22 provisions in the Code of Federal Regulations, is

1 that correct?

2 A. Yes.

3 Q. And those provisions are
4 Section 646.214(a)(1) and 646.214(a)(2).

5 Do you see that?

6 A. Yes, I do.

7 Q. Could you just read in the record those
8 provisions?

9 A. Yes.

10 The first in (a)(1), "Facilities that
11 are the responsibility of the railroad for
12 maintenance and operation shall conform to the
13 specifications and design standards used by the
14 railroad in its normal practice subject to approval
15 by the state highway agency and FHWA."

16 Q. Okay. Read Section (a)(2).

17 A. (a)(2). Facilities that are the
18 responsibility of the highway agency for maintenance
19 and operations shall conform to the specifications
20 and design standards and guides used by the highway
21 agency in its normal practice for federal aid
22 projects."

1 Q. Is this facility, the proposed Mississippi
2 River bridge, a facility that is going to fall into
3 Section (a)(1) or into Section (a)(2)?

4 A. It's my understanding it's to be maintained
5 by the state, so it's (a)(2).

6 Q. What is the practice of Illinois with
7 respect to installing fences on interstate bridges
8 over railroads? Does Illinois have a practice?

9 A. We currently do not use fences on
10 interstates over railroads.

11 Q. Now, does the Federal Highway
12 Administration require the Department of
13 Transportation to follow AASHTO's guidelines?

14 A. Generally that is the case, correct.

15 Q. I would show you what has been marked as
16 Exhibit 44.

17 I'm going to ask you if you are
18 familiar with this provision of the Code of Federal
19 Regulations.

20 A. Yes, I am.

21 Q. And it's Part 625. It says design
22 standards for highways, is that correct?

1 A. Yes.

2 Q. I'd like to direct your attention to 625.4.

3 Are you familiar with this section?

4 A. Yes, I am.

5 Q. And basically, what does this section say?

6 Can you summarize it?

7 A. It's a listing of the various standards and

8 codes, specifications that are used in the United

9 States to design bridges.

10 Q. And does this listing include the AASHTO

11 bridge design standards?

12 A. Yes, it does.

13 Q. I'd like to refer you to what has been

14 marked as Petitioner's Exhibit 45 and ask you if you

15 are familiar with this document?

16 A. Yes, I am.

17 Q. Would you tell His Honor what this document

18 is?

19 A. This is the current or at least a portion

20 of the current AASHTO LRFD, which is load resistance

21 factor design.

22 Q. Now, can you slow down?

1 Just for the court reporter, that's
2 A-A-S-H-T-O and then L-R-F-D.

3 A. Load resistance factor design, bridge
4 design specifications, and it's the 4th Edition 2007,
5 and I believe there are 2009 interims.

6 Q. Now, I'd like to direct your attention to
7 Section 13.4 of this design specification document.

8 A. Okay. That's on page 13-3. It's near the
9 back.

10 Q. And can you just read that?

11 A. Yes. 13.4. The owner shall develop the
12 warrants for the site.

13 Q. Now, the owner, in this case, the owner is
14 the Missouri Department of Transportation and the
15 Illinois Department of Transportation, is that
16 correct?

17 A. That is correct.

18 Q. Okay. And what are warrants?

19 A. Warrants is a legal term to permit the
20 bridge to be built.

21 Q. Okay. And then continue, please.

22 A. A bridge railing should be chosen to

1 satisfy the concerns of the warrants as completely as
2 possible and practical.

3 Q. Now, in the context of AASHTO, a bridge
4 railing includes not only what a lay person would
5 think of as a railing but it also includes things
6 like parapet walls and fences, is that correct?

7 A. That is correct.

8 Q. So it's an all inclusive term that includes
9 the 42-inch parapet wall on the proposed bridge as
10 well as TRRA's demand for additional fencing above
11 that parapet wall, is that correct?

12 A. That's correct.

13 Q. Continue reading, please.

14 A. Yes. Railings shall be provided along the
15 edges of the structure for protection of traffic and
16 pedestrians. Other applications may be warranted on
17 bridge length culverts.

18 Q. Continue, please.

19 A. A pedestrian walkway may be separated from
20 an adjacent roadway by a barrier curve, traffic
21 railing or combination railing as indicated in Figure
22 1, which is shown on the page.

1 On high speed urban expressways where
2 a pedestrian walkway is provided, the walkway area
3 shall be separated from the adjacent roadway by a
4 traffic railing or combination railing also shown in
5 the drawing.

6 Q. So is it your understanding that as a
7 result of this, it is the owner that shall develop
8 the specifications for the bridge site in terms of
9 railings?

10 A. That's correct.

11 Q. Now, can I direct your attention to
12 Section 13.7.2 that's on page 13-7?

13 A. Yes, I have it.

14 Q. That section refers to test level selection
15 criteria, is that correct?

16 A. That is correct.

17 Q. Okay. And there is indicated there six
18 different test level selection criteria, is that
19 correct?

20 A. That is correct.

21 Q. It runs from TL-1 to TL-6?

22 A. Yes.

1 Q. Can you just generally tell His Honor what
2 those criteria mean and what they are?

3 A. As you go increasing from 1 to 6, it's a
4 more severe loading on the barrier system or the
5 railing combination, 1 being the least and 6 being
6 the greatest.

7 Q. And by loading on the barrier system, what
8 do you mean?

9 A. Again, the criteria for a railing or
10 barrier is to maintain the occupants or the vehicles
11 on top. So we deal with like 1 and 2 as mainly like
12 work areas, construction zones.

13 I think when you get into vehicular,
14 it actually starts at TL-3 and works your way up from
15 there.

16 Q. With TL-6 being the highest?

17 A. That's correct.

18 Q. And the higher you go is it fair to say
19 that the stronger the barriers must be?

20 A. Yes. The actual test is like a truck at a
21 certain angle, a certain size and speed, and yes, as
22 you go higher, there are higher loads that cause the

1 load to be across the structure; the barrier that is.

2 Q. Who is to decide what is the barrier level,
3 the TL level that is to be installed on the bridge?

4 A. It's the next portion in the code. "It
5 shall be the responsibility of the user agency to
6 determine which of the test levels is most
7 appropriate for the bridge site."

8 Q. For this bridge, has Missouri decided what
9 is the test level that is most appropriate for this
10 bridge?

11 A. Yes, they have.

12 Q. And what test level is the most
13 appropriate?

14 A. They have decided on TL-5.

15 Q. And would you just read into the record
16 what test level TL-5 is?

17 A. TL-5, test level 5, taken to be generally
18 acceptable for the same applications as TL-4 and
19 where large trucks make up a significant portion of
20 the average daily traffic or when unfavorable site
21 conditions justify a higher level of rail resistance.

22 Q. Do you agree with that test level?

1 A. Yes, Illinois agrees.

2 Q. Now, does a 42-inch parapet wall as
3 proposed for this bridge meet test level TL-5?

4 A. Yes, it does.

5 Q. Is it fair to say that the 32-inch parapet
6 wall that was originally proposed for the bridge only
7 meets test level 4?

8 A. That is correct.

9 Q. So when you go from 32-inch parapet wall to
10 42-inch parapet wall, you're going from test level 4
11 to test level 5, is that correct?

12 A. That is correct.

13 Q. At test level 5, are there any fences that
14 meet TL-5 standards?

15 A. I am not aware of any fence that meets
16 TL-5.

17 Q. In fact, I'm showing you Petitioner's
18 Exhibit 43. This is a publication of the FHWA which
19 shows testing of a fence identified as vertical
20 parapet with security fence.

21 Are you familiar with that?

22 A. Yes.

1 Q. What test level is this fence meeting?

2 A. This has been tested, it looks like Georgia

3 is the state that requested, and it's a TL-4.

4 Q. So if something is being requested to be

5 installed on a bridge that has not been tested out at

6 the TL-5 level, would you consider that proposed

7 fence to be crashworthy?

8 A. No, I would not.

9 Q. What do you mean by the term crashworthy?

10 A. Crashworthy is the process of having it

11 actually tested by independent people. I mean, there

12 are requirements, and if they pass, they get to be on

13 a list. If they don't, then they are not.

14 The effort is to try to give options

15 to the owners that have been crash tested and that

16 DOT does not have to do it themselves.

17 Q. Okay. Now I would also draw your attention

18 back again to Petitioner's Exhibit 45, the AASHTO

19 bridge design standards, specifically to

20 Section 13.7.3.1.

21 JUDGE JACKSON: Can I have that again?

22 MR. REDMOND: 13.7.3.1.

1 JUDGE JACKSON: Thank you.

2 Q. BY MR. REDMOND: Does this come under the
3 indication railing design?

4 A. Yes, it does.

5 Q. And would you read this section?

6 A. A traffic railing should normally provide a
7 smooth continuous face of rail on the traffic side.
8 Steel posts with rail elements should be set back
9 from the face of rail. Structural continuity in the
10 rail members and anchorages of the end should be
11 considered. A railing system and its connection to
12 the deck shall be approved only after they have been
13 shown through crash testing to be satisfactory for
14 the desired test level.

15 Q. Now, we've talked about crash testing, and
16 are you familiar with examples of crash testing, how
17 it's done?

18 A. Yes, I am.

19 Q. I would like to show you what has been
20 marked as Petitioner's Exhibit 47 and ask you if you
21 can identify this document?

22 A. Yes. This document is some still shots of

1 a video that was taken of a vehicle that was used in
2 a test of a particular barrier system.

3 Q. And do these shots show how -- the purpose
4 of this is to show how a vehicle reacts in terms of
5 the mechanical forces on it when it hits a parapet
6 wall or some other form of barrier, is that correct?

7 A. Yes. The intention is to satisfy the code
8 where it's to redirect the truck in a smooth manner,
9 or vehicle, so it does not fly off the structure or
10 doesn't bounce off into oncoming traffic.

11 Q. Now, why is crashworthiness an issue for
12 you in connection with TRRA's request to install this
13 fence on the 42-inch parapet wall?

14 A. Well, based on my knowledge of crash
15 testing and the requirements from FHWA and the actual
16 code, I would find that if there was a fence on top
17 of that barrier, then I would imagine, I think
18 everyone can see, that the deflection of the truck
19 would impact the fence.

20 You can see the horizontal deflection
21 of the truck would certainly engage the fence, and by
22 doing so, I fear that the occupants of the truck

1 would be very much in danger, and also, there's a
2 good possibility of a snag as we call it. It would
3 somewhat slow down the truck. It would maybe
4 whiplash the load and cause further accidents out on
5 the structure.

6 Q. So the concerns are threefold as I
7 understand them.

8 The first concern is that if you
9 introduce a fence on top of a parapet wall that has
10 been crash tested but the fence has not, that could
11 affect the dynamics of how the truck interacts with
12 the parapet wall, is that correct?

13 A. Correct.

14 Q. And the purpose of the parapet wall and its
15 design is that if the truck hits the parapet wall,
16 it's supposedly to direct the truck along the parapet
17 wall till it comes to rest, is that correct?

18 A. Yes. The intent is to allow the truck to
19 deflect, slightly tip, dissipate the energy, and then
20 be safely slowed down and stopped in the shoulder
21 area.

22 Q. And is your concern with the crashworthy

1 testing to level TL-5 that somehow the installation
2 of a fence could affect these dynamics so that a
3 truck could be spun out from the traffic or at least
4 we don't know what would happen, is that correct?

5 A. Exactly. That's why crash testing is done,
6 to see if it would pass or fail or have to be
7 modified.

8 Q. Now, the second concern you've voiced was
9 to the occupants inside the truck, is that correct,
10 or to any vehicle for that manner?

11 A. Yes. My understanding is the weakness of
12 the fence, that it would be very fragile. You don't
13 really know what kind of control you have over its
14 location during the crash. It has not been tested.
15 Therefore, various elements of the fence could impact
16 or penetrate the windshield or actually fly down onto
17 the people down below or people behind. You know, it
18 just goes everywhere.

19 Q. So the fence could, in a sense, either be
20 stripped off the barrier wall and go down below or it
21 could stay on top and be thrown out into traffic and
22 back, is that correct?

1 A. Correct, or actually penetrate the
2 vehicle's windshield and unfortunately cause injury
3 or death.

4 Q. Now, as a result of the lack of
5 crashworthiness of this proposal, do you have any
6 concerns about liability issues for the installer or
7 for the agency that would allow for the installation
8 of the fence?

9 A. Yes. Part of my assignment is always to
10 weigh the various risks with the intents of the code.
11 We generally try to meet the code as a minimum, and
12 we certainly try to use engineering judgment, but in
13 this case, we feel that it would cause liability if
14 the fence was placed on top of the barrier for the
15 reasons we've discussed.

16 MR. REDMOND: Give us a minute, Your Honor.

17 JUDGE JACKSON: Yes.

18 (Pause)

19 MR. REDMOND: Those are all the questions I
20 have.

21 JUDGE JACKSON: All right. Thank you.

22 Ms. Lemley?

1 MS. LEMLEY: Your Honor, we request a brief
2 recess to prepare cross-examination.

3 JUDGE JACKSON: All right. Five minutes?

4 MS. LEMLEY: Can we take ten?

5 JUDGE JACKSON: Sure.

6 (Recess taken.)

7 MS. LEMLEY: Good afternoon, Mr. Anderson.

8 THE WITNESS: Good afternoon.

9 CROSS-EXAMINATION

10 BY MS. LEMLEY:

11 Q. You have testified extensively about crash
12 testing.

13 How many crash tests have you been
14 involved in personally?

15 A. I am not aware of any that I have
16 personally been involved in. Generally it's done by
17 an independent group, and the results are then given
18 to the states and the various government FHWA's.

19 Q. How many times has a railing been crash
20 tested at the request of the Illinois Department of
21 Transportation?

22 A. I am not aware of any that Illinois has

1 asked for.

2 Q. Do you still have Petitioner's Exhibit 41
3 before you, the chart of bridges?

4 A. Yes.

5 Q. And the number reaches 423 on the final
6 page.

7 A. Yes.

8 Q. You testified that you located 423
9 overpasses of rail lines, correct?

10 A. Interstates over some rail, yes.

11 Q. Okay. If you look at the first two items,
12 it shows that they are at the same mile marker
13 eastbound and westbound.

14 A. Yes.

15 Q. And you're counting those as two
16 overpasses?

17 A. Yes. Quite often, the way the database
18 counts is if, like in this case, we have separate
19 superstructures. Like in the proposed I-70 bridge,
20 there's a slight opening, and you'll record them as
21 two different numbers, usually in sequence.

22 Q. And that happens throughout this list quite

1 often, doesn't it?

2 A. Interstates are normally one of the
3 four-lane split highway, and that's the way you
4 design your bridges is they're separated.

5 Q. So to clarify, many of the overpasses on
6 this list, you may have two on the list that are
7 actually in the same location?

8 A. That's correct.

9 Q. When you randomly selected overpasses for
10 review by your staff, did you take that into account?

11 A. Well, the 150 that they did look at, it
12 could have been where there was two, as you call it,
13 two structures, yes.

14 Q. Can you tell me on the list contained on
15 Exhibit 41 how many of these cross yards where
16 switching occurs?

17 A. I would not know that.

18 Q. Can you tell me which of those overpasses
19 cross railroad tracks where workers are consistently
20 on the ground at those tracks?

21 A. The database isn't that refined.

22 Q. So you didn't do any analysis on what type

1 of rail operation travels underneath these
2 overpasses?

3 A. No. The database just found where
4 interstate highway bridges crossed some type of
5 track.

6 Q. You would agree that many of these are in
7 the Chicago area, correct?

8 A. Yes.

9 Q. Does the list on Exhibit 41 also include
10 structures that are under construction currently?

11 A. I don't believe so.

12 Q. Did you do any analysis on the design of
13 those structures spanning railway lines?

14 A. That are under construction?

15 Q. Correct.

16 A. No. The database would not have included
17 them, and we did not.

18 Q. So you can't say with certainty whether or
19 not fencing is being affixed to those structures
20 under construction?

21 A. No. I think I can still say that
22 interstate bridges in Illinois will not have fencing

1 on them, interstate bridges.

2 Q. Interstate bridges crossing railway lines?

3 A. Yes.

4 Q. Is there any circumstance under which you
5 would state that fencing is reasonable on those
6 structures over railway lines?

7 A. At this time, no.

8 Q. So in your mind, the fact that it's a
9 workplace underneath the overpass, that is
10 insufficient to satisfy a need for fencing?

11 A. Yes.

12 Q. In Illinois Department of Transportation's
13 design of interstate highway overpass structures
14 spanning railroad lines, are the railroad safety
15 guidelines taken into account?

16 A. In what way? I guess can you explain
17 safety?

18 Q. Are they considered?

19 A. Well, they would be considered.

20 Q. So you typically review the safety
21 guidelines of the railroad prior to finalizing your
22 design of the overpass?

1 A. Well, as stated before, interstate
2 highways, because there's no pedestrians, we don't
3 put the fencing on them. That's been already
4 explained. Bridges go over many things, interstate
5 bridges.

6 Q. Interstate bridges spanning railway lines,
7 do you consider the railroad safety guidelines in
8 your design of those bridges?

9 A. That would generally be done in the Phase I
10 process which is done at the district level.

11 Q. Can you state that that is done?

12 A. As far as I know, the district handles that
13 portion of the assignment.

14 Q. You talked about as far as crash testing
15 that the Illinois Department of Transportation
16 decided to assign the bridge railing at the overpass
17 over the Wiggins Ferry yard a TL-5 crash testing
18 rating, correct?

19 A. Actually, it was MoDOT, Missouri's call.

20 Q. Okay. So were you involved in that
21 decision?

22 A. Yes. The district has been involved in all

1 facets.

2 Q. What was your involvement in that decision?

3 A. The way the process works is if there are
4 bridge issues, then they are brought to my staff's
5 attention in the planning stage, which we call
6 planning, and such as TL-4, TL-5, whenever those
7 decisions would be made, we would follow through on
8 the actual design of those levels.

9 Q. When was the TL-5 set for the railing on
10 the MRB bridge project?

11 A. That would be at the district level.

12 Q. So you can't state when that was assigned?

13 A. It's a part of Phase I as they call it.

14 Q. So you're saying that Phase I is the early
15 stages of design?

16 A. Yeah. There's three phases in the project.

17 Phase I is basically the agreements,
18 the geometry, and Phase II is once those issues are
19 established, then you actually get into the design
20 phase which is where my office tends to be more
21 active, and Phase III is in the construction phase.

22 Q. What phase are we in now?

1 A. I think we're very close to the end of
2 Phase II. We're getting close to construction.
3 Q. When did Phase I end?
4 A. Well, obviously I guess it's still going on
5 because of this hearing.
6 Q. So you would consider this hearing to be
7 Phase I?
8 A. I believe so.
9 Q. When was the decision to assign the TL-5
10 rating to the barrier in this case?
11 A. It was done at the district level. I
12 couldn't say exactly the date.
13 Q. Was it a week ago?
14 A. I could not tell you that.
15 Q. Was it yesterday?
16 A. No.
17 MR. REDMOND: Objection, Your Honor. Asked and
18 answered.
19 JUDGE JACKSON: Go ahead.
20 Q. BY MS. LEMLEY: What documentation would be
21 in the file regarding the assignment of the TL-5
22 standard?

1 A. Well, there's a record of decision.
2 There's Phase I. That's where the railing
3 requirements would be, and in the design drawings,
4 you already have the TL-5. It's already there. I
5 mean, the design is complete.

6 Q. What do you mean the TL-5 is already there?

7 A. The 42-inch concrete barrier with the
8 proper reinforcement.

9 Design, you need to know your dead
10 loads and live loads, as we refer to them, to do the
11 design.

12 MR. REDMOND: Can you speak up, please?

13 A. You need to know all your loads to finish
14 up the design. The TL-5 has a certain weight to it,
15 has a certain volume of concrete, so the design needs
16 to know those factors to move forward.

17 I know the judge is aware that we're
18 planning on having a letting in the very near future,
19 so the design is basically complete.

20 Q. You've been here throughout the entirety of
21 the hearing in this matter, correct?

22 A. Yes.

1 Q. So you've heard testimony from the Missouri
2 Department of Transportation, Greg Horn, regarding
3 the railroad requesting a 42-inch barrier rail, and
4 that being accommodated by the Missouri Department of
5 Transportation, correct?

6 A. Yes, I'm aware of that.

7 Q. So was the TL-5 rating set before or after
8 that decision?

9 A. I cannot say that. It's Phase I.

10 Q. How did you, prior to coming to this
11 hearing, determine what the TL rating was on the
12 barrier wall?

13 A. I knew from the height of the parapet that
14 was on the design drawings.

15 Q. So you looked at the 42-inch barrier wall,
16 and that told you that TL-5 was the rating?

17 A. Yes. That generally is the case.

18 Q. A 42-inch barrier wall could also be a TL-4
19 rating, couldn't it?

20 A. You wouldn't want to overdesign unless you
21 take credit for it.

22 Q. Well, Missouri Department of Transportation

1 testified here that the 42-inch barrier rail was an
2 accommodation to the railroad, so that seems to fit
3 your description.

4 A. Well, the TL-5 also accounts for the
5 traffic patterns that we do expect at this location.
6 It was an eight-lane bridge. Now it's a four-lane.
7 There's a lot of traffic in the St. Louis area, and
8 there is a curve, horizontal curve approaching the
9 span that has the tracks below.

10 Therefore, a TL-5 in my opinion is a
11 much better design for the situation.

12 Q. Where on the design plans does it state
13 that the bridge railing is a TL-5 or must be a TL-5?

14 A. Again, it's the dimensions of the barrier.
15 I think in the documents in Phase I, it would
16 probably be referred to as a TL-5.

17 Q. So just to confirm, you have made an
18 educated assumption that the barrier rail is a TL-5
19 because of the height of it in the plan?

20 A. Yes, and also through conversation with
21 MoDOT we're aware that that's the case.

22 Q. I wanted to back up to your survey of the

1 overpasses that we talked about initially.

2 A. The photos?

3 Q. Yes, I'm going to back up to the photos.

4 We didn't cover that.

5 Do you have Exhibit 42 before you?

6 A. Yes, I do.

7 Q. And you said that these are some photos of,

8 this is four pages of photos, and this is a sampling

9 of the 150 overpasses that your staff reviewed?

10 A. Yes, and it also is I believe the

11 structures that have been built since 2001.

12 Q. Okay. Well, let's talk about the first

13 one.

14 You say that this is over -- and you

15 can tell me what railroad that is. I don't know that

16 particular...

17 A. It's just the...

18 Q. Okay. LA and TP&W Railroad, do you know

19 what the operations are under that overpass?

20 A. No, I do not.

21 Q. So you don't know if it's a through track

22 or what happens there?

1 A. I do not know.

2 Q. Are you personally familiar with this
3 overpass?

4 A. I have been at the location, but I really
5 didn't observe the operation of the tracks.

6 Q. Okay. If you turn to page 2, this looks to
7 be a couple of pictures over CSXT Railroad?

8 A. Correct.

9 Q. What are the railroad operations under that
10 overpass?

11 A. Well, I do not know for sure, but looking
12 at the photo, the second one, the one on the right,
13 it does look like one or two tracks, so I assume it's
14 a through track.

15 Q. Do you know that definitively?

16 A. No, I do not.

17 Q. Okay. Would you turn to No. 3?

18 This looks like again over the CSXT
19 Railroad.

20 A. Correct.

21 Q. Can you tell me about the railroad
22 operations under that overpass?

1 A. The photo is not real clear, but I believe
2 it would be possibly a through track, but I cannot
3 say for sure.

4 Q. And on the fourth picture with the el
5 train, are you familiar with this particular
6 overpass?

7 A. Yes, I think I have seen this location.

8 Q. And do you know what the operation of that
9 train is at that location?

10 A. It's just the el.

11 Q. It's a through?

12 A. It's a through train I believe.

13 Q. You testified with regard to the CFR
14 Section 646.214(a)(2) in your testimony?

15 A. Yes.

16 Q. And you read it into the record. Do you
17 recall that?

18 A. Yes.

19 Q. If you'd like to review it again, that's
20 fine.

21 Are you there?

22 A. I'm aware of it, yes.

1 Q. Okay. And you stated, well, you concluded
2 that it states that to the extent that the
3 transportation agency is maintaining the overpass,
4 its standards apply.

5 The U.S. Department of Transportation
6 memo marked as Exhibit D goes on to interpret the two
7 sections that you read from the CFR.

8 I'm going to hand you a highlighted
9 copy, and I'll ask you to read into the record the
10 highlighted portions.

11 And for the record, this is on page 2.

12 JUDGE JACKSON: Of Exhibit --

13 MS. LEMLEY: Of Exhibit D.

14 JUDGE JACKSON: Of Exhibit D?

15 MS. LEMLEY: Of Exhibit D. It's page 2 under
16 the paragraph 1 entitled "Railing Parapet
17 Requirements and Fencing," and then in parentheses
18 (highway over railroad).

19 If you would read these highlighted
20 portions, and there's one on the next page as well.

21 THE WITNESS: Okay. This is under item 1, the
22 second page. For a highway bridge over a railroad,

1 the governing regulation is 646.212(a)(2).

2 For highways on National Highway
3 System (NHS), the states must comply with AASHTO's
4 standards which explicitly incorporate railroad
5 standards.

6 Both AASHTO standard specifications
7 for highway bridges and LRFD bridge design
8 specifications contain the following provisions:
9 Structures designed to pass over a railroad shall be
10 in accordance with standards established and used by
11 the affected railroad in its normal practice. These
12 overpass structures shall comply with applicable
13 federal, state, county and municipal laws.
14 Regulations, codes and standards should, as a
15 minimum, meet the specifications, design standards of
16 the American Railroad Engineering Association and the
17 Association of American Railroads and AASHTO.

18 And following on to the third page:
19 Conflicts with these matters should be minimal when
20 the project involves NHS highway over a railroad.

21 Q. The Missouri River Bridge highway is
22 Interstate 70, correct?

1 A. That is correct.

2 Q. It is a National Highway System roadway,
3 correct?

4 A. That's correct.

5 Q. Now, I'll ask you to look at Petitioner's
6 Exhibit 45 which are the AASHTO LRFD bridge design
7 specifications. If you would turn to Section 2.3.3.4
8 entitled "Railroad Overpass." This is on page 2-6 it
9 looks like.

10 A. Yes.

11 Q. Is that the same language that you read on
12 the memo?

13 A. Yes, I believe it is exactly the same
14 language. 2.3.3.4 is the same as I just read in the
15 memo.

16 Q. Has the memo since it's been written been
17 retracted by the U.S. Department of Transportation?

18 A. To my knowledge, no.

19 Q. It has not been overruled?

20 A. No, it has not.

21 Q. With regard to the -- I'm sorry I'm jumping
22 around. I didn't have a lot of time to prepare for

1 this so you have to excuse my disorganization.

2 Jumping back to the photos of the
3 overpasses on the interstate highways over rail lines
4 that you said are the recent ones built since I think
5 you said 2001...

6 A. Correct.

7 Q. ...do you know what the standards, the
8 safety standards are for the railroads indicated on
9 those photos?

10 A. I am not personally aware of what the
11 standards would be.

12 Q. On any of the railroads pictured on that
13 exhibit?

14 A. No. I'm sure it's in the records for each
15 project, but I personally am not aware.

16 Q. So you can't tell me whether or not there's
17 a fencing requirement for those railroads and their
18 safety guidelines?

19 A. I cannot.

20 Q. You mentioned a database whereby if a
21 parapet and railing was crash tested and approved
22 previously that you could go and look and see whether

1 or not it had been used and had been approved, and in
2 that sense, if you have the same design, you have the
3 go ahead to add it to your design.

4 Is that a fair statement?

5 A. Yes, the crash testing would be recorded
6 generally by FHWA, and then that would be allowed for
7 the various owners to then use off that list.

8 Q. Where is that database held?

9 A. It would be at the FHWA Web site. I
10 believe it's in one of the exhibits.

11 Q. You believe the list of current approved
12 parapet designs is in one of the exhibits?

13 A. The Web site I'm sure is in one of the
14 exhibits, and then you have to go to that Web site.

15 Q. Okay. The address is included in that
16 exhibit?

17 A. Yes.

18 Q. Is that list available to the public?

19 A. I believe it would be. I don't think it's
20 protected in any way.

21 Q. In connection with your crash testing
22 analysis, did you review the AASHTO Protective

1 Screening Guide for Overpasses?

2 A. I am not aware.

3 Q. So that's a no?

4 A. That's a no.

5 Q. What I mentioned with regard to the

6 previously tested systems, that's in the AASHTO LRFD

7 Bridge Design Specifications, isn't it?

8 If you'd turn to page 13-8 of that

9 document, and that is exhibit...

10 JUDGE JACKSON: 45.

11 MS. LEMLEY: ... 45, under 13.7.3.1.1,

12 application of previously tested systems.

13 A. Yes, the article that offers previously

14 tested systems would be applicable.

15 Q. Okay. Did you look at the listing or

16 database of approved designs to see if the design

17 proposed by Terminal Railroad has been approved?

18 A. I don't believe it has been approved, but I

19 do not see one that had a fence on it, no.

20 Q. Did you go to the list prior to your

21 testimony today?

22 A. Yes, I've visited the list.

1 Q. What did you do to research that issue?

2 A. I took a look at the Web site, went through
3 the list, and I was looking for the TL-5 which has
4 been established, and I did not find any that had the
5 fencing on them.

6 Q. So when you go to the list, you first go to
7 the TL rating to find the list of designs approved?

8 A. It's just a part of the columns of
9 information, and you have metal rails, you have
10 concrete rails, you have timber rails, and you just
11 go down and you look for your TL-5 and you see what
12 options you have, and then you have various options.

13 In this case, Missouri had decided to
14 go to the single sloped concrete barrier, and we
15 certainly agree with that decision. It's a safe
16 rail.

17 Q. But again, you weren't involved in the
18 decision to rate that a TL-5?

19 A. As I said before, the process is generally
20 handled at the Phase I which is at the district,
21 generally the district level.

22 Q. If a bridge parapet that has been built in

1 the last five years on a National Highway System --
2 that would include all the states, correct, the
3 National Highway System spans all of the states?

4 A. Interstates are a part of that system, yes.

5 Q. Okay. If a bridge with a railing the same
6 as is designed by or proposed by Terminal Railroad in
7 this case was, in fact, constructed on a bridge
8 overpass on an interstate highway in another state,
9 wouldn't you assume that it had been approved by the
10 Federal Highway Administration?

11 A. No, I would not.

12 Q. Why is that?

13 A. Because based on my knowledge of the crash
14 testing list, I knew that we know what is required.

15 The other state, well, that's their
16 prerogative.

17 Q. So the Federal Highway Administration
18 doesn't require the crash testing that you have been
19 testifying to today? Is that what you're saying?

20 A. All I can speak for is Illinois. Illinois
21 requires crash testing.

22 MS. LEMLEY: One moment.

1 (Pause)

2 MS. LEMLEY: Okay. We've regrouped here.

3 Q. Do you have before you Petitioner's
4 Exhibit 46?

5 A. I do not see it.

6 Q. Oh, let me hand it to you.

7 JUDGE JACKSON: 46?

8 MS. LEMLEY: 46. Yes, Your Honor.

9 Q. Have you seen this document before?

10 A. Yes, I have.

11 Q. Would you please read the first paragraph
12 and the first sentence of the second paragraph into
13 the record, please?

14 A. Yes. Bridge railings, although technically
15 classified as longitudinal barriers, are listed
16 separately here because they have been previously
17 tested under criteria different from roadside
18 barriers that have not generally been accepted for
19 use on the NHS on an individual basis.

20 Since August 28, 1986, the FHWA has
21 required that bridge railings used on federal aid
22 projects meet full scale crash test criteria and has

1 provided listings of those railings meeting these
2 requirements.

3 Q. So I just want to understand your previous
4 testimony.

5 You're saying that other states may
6 not follow the Federal Highway Administration guide
7 and requirements for their barriers?

8 A. I cannot speak for other states; just
9 Illinois, but it's my understanding that since
10 August 28, 1986, that the railings on federal aid
11 projects require crash testing.

12 Q. And then the memo continues to talk about
13 the list of approved designs, doesn't it?

14 A. Yes, this is a portion of a Web site that
15 lists several crash approved, crash tested railings.

16 Q. So let me ask you again, if the exact
17 bridge parapet wall and fence configuration, exactly
18 what is proposed by Terminal Railroad in this case,
19 if it is on not one, not two, but multiple bridges on
20 the National Highway System in the exact same
21 configuration, you would not then make an assumption
22 that it had been passed by the Federal Highway

1 Administration?

2 A. Well, I would then take a look if it was
3 then part of this listing. That's again part of the
4 FHWA's process. If it's on there, then I wouldn't
5 question. If it's not, then I would.

6 You know, if it's not on there, it's
7 not crash tested.

8 Q. You talk about the term "bridge railing."

9 A. Yes.

10 Q. And you testified that that is a term that
11 includes the parapet plus fencing both together?

12 A. Yeah; railings, barriers, fencing, they all
13 kind of mean the same. I mean, crash tested railings
14 quite often are concrete parapets.

15 Q. Where is a definition of bridge railing
16 that states that it is the parapet plus fencing above
17 it?

18 A. I believe at the end, Section 13 which I
19 think was read in earlier.

20 Earlier on under 13.4, it says,
21 "Railings shall be provided along the edges of
22 structures for protection of traffic and

1 pedestrians."

2 Q. Is there a definition of the term "bridge
3 railing" that you can direct us to?

4 A. I would say that it is in several locations
5 of Section 13, but it can be a combination of
6 concrete and fencing or metal if that's what you're
7 alluding to.

8 Q. I'm just asking where it is defined as
9 the --

10 A. The combination?

11 Q. -- the traffic barrier railing and a chain
12 link fence above it, and that being considered the
13 barrier railing.

14 MR. REDMOND: I can direct, counsel, to Figure
15 13.7.1.1-1.

16 MS. LEMLEY: I would like him to not answer for
17 his witness, Your Honor.

18 JUDGE JACKSON: If it will shorten this up, I
19 might let him.

20 THE WITNESS: Yeah, I...

21 MS. LEMLEY: This person has testified that
22 he's an expert in this particular topic, and he's

1 testified about bridge railings.

2 JUDGE JACKSON: But we're dealing with
3 voluminous -- we have literally a thousand pages
4 here, so any help I can get.

5 Go ahead and answer.

6 THE WITNESS: Yes, there are several drawings
7 in Section 13 that allude to various types of
8 barriers, railings, combinations thereof.

9 Like at the top of page 13-6, the
10 combination railing conforming to the dimensions
11 given in Figure 13.8.2-1 and 13.9.3-1 and crash
12 tested where a sidewalk may be considered acceptable
13 for use and so forth. I mean, there's just many
14 locations where combination is explained.

15 Q. You testified to Exhibit 47 which is a
16 truck that was being crash tested.

17 Where did you find this photo?

18 A. This I believe was out on the FHWA Web site
19 again. I actually received it from staff. I'm sure
20 that's where we found it.

21 Q. Do you know what speed that truck was
22 traveling?

1 A. I'm sure it's all categorized in the tables
2 of crash testing, and it looks like this is a box
3 truck, and I would estimate that it was probably
4 going at 50 miles per hour according to Table
5 13.7.2-1.

6 Q. How high is the parapet in this picture?

7 A. Well, I would estimate this to be probably
8 the TL-4 test, so I believe that would be 32 inches.

9 Q. Why would you assume that it's a TL-4 test?

10 A. Because the type of truck and looking at
11 the table, I would allude to that. There's only one
12 test in that table that I offered that requires that
13 type of truck, and it's at 50 miles per hour, and if
14 you go across, it's a TL-4.

15 Q. You testified that a fence atop the parapet
16 would, in fact, be a more dangerous situation?

17 A. Yes.

18 Q. To your knowledge, has that been tested?

19 A. No, I do not know that a fence has been
20 tested.

21 Q. Have you ever seen a fence crash tested?

22 A. No, I have not.

1 Q. So you're not basing that on your personal
2 experience and your expert opinion?

3 A. No. Based on the deflection of the truck,
4 if you will imagine the fence to be there, obviously
5 it's going to get impacted.

6 Q. I think you testified that it would be more
7 dangerous for the driver if the fence was on top of
8 that parapet.

9 A. That's one of the dangers.

10 Q. Have you seen that danger or tested that
11 danger to reach that opinion?

12 A. I have not tested it, but based on what I
13 would envision in engineering judgment of where that
14 fence would be, the fence being extremely weak item
15 would not help deflect the truck at all or a very
16 minor amount, and the vehicle would get hung up, and
17 most likely, the fence being a very weak item would
18 disintegrate and be a projectile.

19 Q. You've never crash tested a vehicle
20 yourself?

21 A. No, I wouldn't recommend it.

22 Q. You haven't been present for crash testing?

1 A. No. I've only seen the videos.

2 Q. How long does it take for crash testing to
3 be accomplished, do you know?

4 I understand you testified before
5 Illinois has never requested something to be crash
6 tested before.

7 Do you have that information?

8 A. Part of the reason, Illinois has had the
9 opportunity to have quite a long list that has been
10 crash tested and then we just feed off of that.

11 We tend not to want to change a
12 barrier too often partly because contractors are very
13 skilled in giving you a better price if it's
14 consistent detail.

15 So most states will pick one barrier
16 type or just a couple different barrier types and
17 continuously use those for the economy.

18 So there's been plenty of testing done
19 that fit Illinois' needs like the F-shape, the New
20 Jersey load, the single slope, so those
21 configurations generally have served Illinois very
22 well, especially on interstates.

1 Q. My question was how long does it take for a
2 barrier rail to be crash tested?

3 A. Based on my understanding, I've heard from
4 other states that it is quite lengthy. You have to
5 have a configuration design, then build, and then you
6 have to then get it like in a queue. You have to
7 supply funding and of course then the vehicles and
8 the testing.

9 So as far as I know, it would be a
10 matters of several weeks if not months.

11 Q. Several weeks or months. That would be
12 shortened by let's say hypothetically the exact same
13 design being implemented in other places so you
14 wouldn't have to develop the design to crash test it;
15 correct?

16 A. No. The design would be I guess there, but
17 it's that it doesn't allow the truck to deflect.
18 Therefore, you have to still do the testing. It has
19 to be crash tested.

20 So you still have to go through the
21 process of building it, actually constructing it and
22 then doing the test.

1 Q. "The Terminal Railroad, in connection with
2 their safety guidelines, has determined that fencing
3 is necessary specifically over a yard in which
4 workers are traveling on the ground underneath the
5 overpass." That's in their safety guidelines.

6 Are you familiar with that?

7 A. I have become familiar over review of
8 documents.

9 Q. So FHWA approval, assuming that the FHWA
10 has not approved this particular design, FHWA
11 approval does not foreclose the issue on this barrier
12 rail being used, does it? It's just a matter of
13 taking a few weeks or months to crash test it?

14 A. Well, I imagine so, yes.

15 Q. So if the railroad by its own safety
16 standards, being in the position to assess their own
17 safety standards, believes that the fence is
18 necessary, what's stopping the crash testing of that
19 barrier rail?

20 A. In my opinion though, the safety
21 requirements from TRRA is for the workers on the
22 ground.

1 My assignment is to make sure that the
2 traveling public on the bridge is met with the proper
3 protocol.

4 Q. Crash testing would determine that, would
5 it not?

6 A. Crash testing, yes.

7 MS. LEMLEY: If I could have just a moment,
8 Your Honor, we'll be able to wrap up.

9 JUDGE JACKSON: Sure.

10 (Pause)

11 MS. LEMLEY: Just a few more questions,
12 Mr. Anderson.

13 Q. First of all, you talked about the TL-5
14 rating, and you said that that was for large trucks
15 and unfavorable site conditions.

16 A. That's the description in AASHTO under
17 TL-5.

18 MS. LEMLEY: I guess now that I've asked the
19 question, you don't know what was considered to
20 determine the TL-5 rating, so scratch that question.

21 JUDGE JACKSON: All right. It's scratched.

22 Q. BY MS. LEMLEY: Query as far as whether or

1 not a fence that would meet the Terminal Railroad's
2 standards for safety could be situated outside the
3 bridge parapet not appended to it and meet the
4 federal highway standards.

5 A. So that's a question?

6 Q. What if a fence that would meet Terminal
7 Railroad standards was placed outside the barrier
8 rail, not on top of it?

9 A. In my opinion, then that would simulate
10 then what we refer to as a barrier to protect the
11 pedestrians prior to the sidewalk, and then that's
12 where the fence would be, on the outside. So there
13 would be an offset so the truck could deflect
14 approximately to five or six feet, generally the
15 width of the sidewalk if that's what you're getting
16 to, but again, that is a very large change in the
17 design of the bridge.

18 Q. How does that affect crash testing in the
19 question?

20 A. As long as the initial barrier on the
21 inside would be TL-5, then...

22 Q. It's not a crash testing issue?

1 A. If the fence is offset far enough, and I
2 believe there are crash testings that have occurred
3 that would give you that approximate offset
4 requirement.

5 Q. If the exact design with the bridge parapet
6 and the fencing atop it that's been proposed by
7 Terminal Railroad in this matter has been approved
8 for use on the National Highway System, would that
9 cure your concerns regarding crash testing of that?

10 A. No, it would not.

11 Q. Would it cure your concerns if it has been
12 crash tested and approved through that channel that
13 is dictated by the Federal Highway Administration
14 memo regarding the crash test?

15 A. If it was properly crash tested, then that
16 satisfies the intent of the requirement.

17 Q. Talking about the database of bridge rails
18 that are approved by the Federal Highway
19 Administration, included on that list are there
20 bridge ratings that are in design that are currently
21 under construction?

22 A. I would imagine so.

1 Q. Do you know how often it's updated, that
2 list?

3 A. Oh, the list, I believe it is quite long
4 now. I mean, there's a lot of options, and, as I
5 stated earlier, states tend not to be shopping around
6 for a lot of different ideas, so as one would come
7 along, a state or an agency would then offer the
8 protocol, the cost, go through the crash testing if
9 it's approved, and it gets back on the list or it's
10 added to the list.

11 Q. It's added to the list immediately after
12 approval even though that may be before construction?

13 A. Oh, yeah. Actually, it has to be done
14 before construction.

15 MS. LEMLEY: Okay. That will be all. Thank
16 you.

17 JUDGE JACKSON: Thank you.

18 Mr. Blair?

19 CROSS-EXAMINATION

20 BY MR. BLAIR:

21 Q. Staff is trying to sort through this, and I
22 think one of the issues here is the TRRA's concern of

1 potential hazard to their employees switching trains
2 on the rail yard or the workplace.

3 So we can get a better handle on the
4 degree of this hazard as it relates to pedestrians
5 statewide, how often do we have incidents of
6 pedestrians being hit by debris from interstate
7 bridges that have no fences today, statewide?

8 A. Well, somewhat by definition, interstates
9 in Illinois do not have fences, so that would be all
10 of our bridges, not just over railroads.

11 Q. Yes.

12 A. Okay. And to my knowledge, as stated
13 before, ten-foot shoulder, you know, 42-inch high
14 barrier, it should be able to contain most of the
15 debris, a lot more than if it was a smaller shoulder
16 or lower parapet.

17 Q. Okay. So it's minimal?

18 A. I would offer it's minimal fear or risk to
19 the people below or vehicles or cars, whatever.

20 The fear of the actual fence, assuming
21 that it would be impacted as shown in the photos,
22 would be a much higher risk to the people below and

1 also certainly to the people in the vehicles and on
2 the bridge with this vehicle that's in trouble.

3 Q. Okay. So it's not the cost that's the
4 problem from what you've testified. It's the public
5 safety concerns, if the fence were installed,
6 outweigh the concerns that the TRRA has of debris
7 hitting employees.

8 A. Well, I guess I would offer, the art of
9 engineering is to try to maximize the benefit to
10 whoever is the owner.

11 So with that in mind, you want to make
12 sure it's crash tested, and if it's not, that's a
13 liability and obviously the fence I don't feel would
14 be, and the opportunity for it to disintegrate and
15 cause more injury is quite high and therefore not
16 encouraged nor has it been crash tested as far as my
17 knowledge.

18 Q. Okay. So if it is crash tested, at least
19 on your testimony, the typical fence would not be
20 crashworthy like a --

21 A. Well, this is interstate requirements.

22 Q. Yes.

1 A. I mean, we do have fencing in Illinois.
2 It's at lower speeds. It's for areas that have
3 pedestrians. I mean, we have fencing.

4 Q. Right.

5 So what you're saying is that if you
6 did have to install a fence, it would have to be
7 structurally much more substantial than a standard
8 fence for it to be crashworthy. Is that what you're
9 saying?

10 A. Well, it is with generally a sidewalk, so
11 the impact -- the testing includes the configuration
12 of a sidewalk.

13 Q. Okay.

14 A. Therefore, part of the energy of the
15 vehicle is absorbed in the tires. It leans over.

16 Does that make sense? It's the energy
17 from the deflection of the vehicle that has
18 dissipated in that sidewalk width.

19 We do have standards that have railing
20 or, I mean, fencing, but it's probably much lower
21 speeds.

22 Q. So what you're saying is you don't even

1 have a design that you could crash test at this point
2 based on --

3 A. Not at a TL-5.

4 Q. -- this type of bridge structure?

5 A. Not at a TL-5; Illinois is not aware of
6 one, a TL-5 requirement.

7 Q. Okay. So in your opinion, are you
8 testifying that public safety would be compromised if
9 fencing were installed?

10 A. In my opinion, if you were to construct
11 anything that wasn't crash tested on the list, yes, I
12 think there is liability to the owner.

13 Q. Okay. With regards to the existing
14 bridges, interstate bridges that you testified to,
15 are any of those, do they span railroad
16 workplace/yard operations such as the TRRA in this
17 case?

18 A. Well, I would offer that there are 423
19 locations, some are dual structures as pointed out,
20 but those are all of them, so I would assume that
21 some, just by the nature of the number, would go over
22 some yards, but that's an assumption on my part.

1 This is the full database, so if there
2 are any in Illinois, they'd be included.

3 Q. Okay. Just from your experience that
4 aren't on the list, are you aware of any in Illinois?

5 A. Pardon?

6 Q. Based on your experience over the years,
7 have you driven over any other locations --

8 A. That aren't interstate?

9 Q. No, that are interstate where you've
10 spanned railroad yard operations.

11 A. You mean outside of Illinois?

12 Q. No, within Illinois.

13 A. No, I am not aware of any that have
14 fencing.

15 Q. That wasn't the question.

16 A. Over railroad yards?

17 Q. Yeah.

18 A. Generally I am looking at the structure and
19 not the function below just to be real honest about
20 it.

21 Q. So you have no knowledge?

22 A. No.

1 Q. With regard to wind loading, how does that
2 affect the installation of crashworthy fencing? What
3 effect would that have on the wind loading of the
4 bridge?

5 A. Well, wind loading, it's my understanding,
6 and I don't know if Greg Horn is still here, it's my
7 understanding that the configuration over the main
8 span where the wind is more of a factor and the
9 stiffness of the structure is much less, then they
10 had to change the railing type.

11 But in this location where the TRR is
12 crossed, it's a relatively very stiff structure, and
13 the wind would never govern. It's going to be the
14 truck impacts and the loads from the trucks. That's
15 what will govern various elements of the bridge.

16 The wind would be a minor factor on
17 this span or this part of the bridge.

18 Q. Okay. And with regards to the ten-foot
19 shoulder, is that a standard width for interstate new
20 bridge construction?

21 A. I believe so, yes.

22 Q. What is the standard for the barrier wall

1 height?

2 A. I think it matters on speed and traffic
3 count, and I believe quite often it's maybe six foot
4 on the inside, six to eight on the inside, and ten
5 foot on the outside, what they call the through lane,
6 the passing lane. It's a two-lane interstate which I
7 believe in this case account for the 40-foot
8 toe-to-toe barrier width of this structure, two
9 12-foot lanes, 10-foot, 6-foot.

10 Q. Thank you.

11 I'm referring to the 32-inch versus
12 the 42-inch height of the barrier wall?

13 A. Okay. Go ahead.

14 Q. What is the standard height of that for a
15 standard bridge?

16 A. Generally we'll use the 32-inch if it's a
17 straight, what we call a tangent or a straight part
18 of the roadway.

19 In this case, there is a horizontal
20 curve, so that's locations -- and I'm aware of this
21 especially in the Chicago area -- where taller
22 parapets are used to contain traffic.

1 Q. Okay. Thank you.

2 With regards to crash testing, let's
3 assume that on the UP section of the bridge where
4 there's an agreement that's been worked out that for
5 now, no fencing, down the road, if it finds, if the
6 parties find that the debris is an issue and then
7 fencing is installed, how long will it take from that
8 point forward before the fencing would be actually
9 installed?

10 A. Well, that would be a part of the, I guess
11 the negotiations of do you want to go through the
12 crash testing, the potential of it not passing, or
13 parts of the opportunity might be to offset the
14 fencing as I think was brought up before, stick it
15 out somehow, but again, that's an assumption at this
16 time.

17 Q. Okay. With your standard crash testing and
18 designing the fencing, how long typically would that
19 process take?

20 A. Illinois has not asked for a crash testing
21 that I'm aware of, but I am aware of some states that
22 have asked, and it's a matter of several weeks or

1 months. It is quite lengthy, and then that's
2 assuming that it passes. You have to do it before
3 you actually construct as mentioned before.

4 MR. BLAIR: Okay. I've got one last question.
5 It's regarding lighting. Is that all right?

6 JUDGE JACKSON: Sure.

7 Q. BY MR. BLAIR: Do you agree with Mr. Horn's
8 testimony with regards to there's not a need in his
9 opinion that lighting is required, that there isn't a
10 tunneling effect, that the bridges dimensions are
11 such that there is enough light that lighting is not
12 necessary? Do you agree with that testimony, what he
13 testified earlier?

14 A. Yes, I would agree to the numbers that have
15 been stated, and it's my understanding the Illinois
16 Department of Transportation Design Manual, you know,
17 the BDE, offers an equation and it's such that we do
18 not need lighting at this location.

19 MR. BLAIR: Okay. That's all I have. Thank
20 you.

21 JUDGE JACKSON: Thank you. Very good.

22 Mr. Redmond, any redirect?

1 MR. REDMOND: Yes. Just very short, Your
2 Honor.

3 JUDGE JACKSON: All right.

4 REDIRECT EXAMINATION

5 BY MR. REDMOND:

6 Q. My first question is you were asked on
7 direct examination about definition of railings and
8 whether those include parapet walls, and I would like
9 to direct your attention to, again, Petitioner's
10 Exhibit 45, Section 13.2 called "Definitions" which
11 are then contained on page 13-1.

12 A. Okay. Yes. Thank you.

13 Q. And do you see the definition of concrete
14 parapet?

15 A. Yes.

16 Q. What does that definition state?

17 A. Concrete parapet on 13-1. A railing system
18 or reinforced concrete having traffic space that
19 usually but not always adopts some form of a safety
20 shape.

21 Q. Okay. Now, actually then the next one --
22 that's the definition of concrete barrier, is that

1 correct?

2 A. That's barrier, yes.

3 Q. And then the next definition is the

4 definition of concrete parapet, is that correct?

5 A. Yes.

6 Q. And read that definition.

7 A. Concrete parapet. A railing system or

8 reinforced concrete usually considered as adequately

9 reinforced concrete wall.

10 Q. From those two definitions, is it fair to

11 conclude that when we use the term railing in the

12 AASHTO standards, we're speaking of not only what the

13 public may think of as a railing but also these

14 parapet walls?

15 A. That's correct.

16 Q. You were asked questions about Exhibit D

17 which is the February 2001 letter from the Federal

18 Highway Administration.

19 I would like to direct your attention

20 to No. 1 which is on page 2 of that letter.

21 Do you have that?

22 A. Yes, I do.

1 Q. And that states in part that regulations,
2 codes and standards should, as a minimum, meet the
3 specification design standards of the American
4 Railway Engineering Association, the Association of
5 American Railroads, and AASHTO.

6 Do you see that?

7 A. Yes.

8 Q. Now, is the American Railway Engineering
9 Association basically an industry association of
10 railroads?

11 A. Yes it is.

12 Q. Does this go by the acronym of AREMA?

13 A. I believe so.

14 Q. Does AREMA have any standards in it for
15 fencing?

16 A. I am not aware of any.

17 Q. You were also asked questions about this
18 particular definition in AASHTO which starts out with
19 the words structures designed, etc.

20 Do you recall those questions?

21 A. Yes.

22 Q. Now, the definition that's referred to,

1 although it's not stated specifically in this memo,
2 is that not the definition found of railroad overpass
3 in Section 2-3.3.4 of the AASHTO guidelines that
4 we've marked as Petitioner's Exhibit 45?

5 MS. LEMLEY: Can you direct us to the page,
6 please?

7 THE WITNESS: Yes. It's page 2-6.

8 Q. 2-6 of --

9 A. Of Section 2.

10 Q. Of Petitioner's Exhibit 45; is that
11 correct?

12 A. That is correct.

13 Q. And that is where the words railroad
14 overpass are found that appear in this 2001 letter,
15 is that correct?

16 A. That is correct.

17 Q. Now, isn't that reference to railroad
18 overpass under a section -- it's within
19 Section 2.3.3, is that correct?

20 A. That is right.

21 Q. And what's the title of that section?

22 A. It is "Clearances."

1 Q. Do fences have anything to do with
2 clearances?

3 A. I don't believe so, no.

4 Q. What are we talking about when we're
5 talking about clearances?

6 A. Clearances in this case is to make sure
7 that there is enough vertical clearance and
8 horizontal clearance to meet the railroad's needs to
9 pass their freight and vehicles through.

10 Q. Okay. By vertical clearance, is that the
11 distance --

12 A. Vertical clearance and horizontal clearance
13 is met so the railroads can get their loads or their
14 freight through or under the bridge.

15 Q. So clearance, there's the concept of
16 vertical clearance, which is the distance from let's
17 say the rails to the underside of the bridge, is that
18 correct?

19 A. Correct.

20 Q. And then there's horizontal clearance which
21 would be distances from the rails to the sides of the
22 bridge?

1 A. Correct.

2 Q. Now, also, opposite the item railroad
3 overpass there's the comment, C2.3.3.4.

4 Do you see that?

5 A. Yes.

6 Q. That comment refers to several chapters in
7 the manual for railway engineering?

8 A. Yes.

9 Q. And it says that this particular item, this
10 section on railroad overpass, you should look at it,
11 at these chapters for clearances, loadings, pier
12 protection, waterproofing and blast protection.

13 Do you see that on the comments?

14 A. Oh, yes, the next page.

15 Q. Does the question of fencing have anything
16 to do with clearances, loadings, pier protection,
17 waterproofing and blast protection?

18 A. No. No, they do not.

19 Q. Now, finally, I'm going to direct your
20 attention to what I believe is marked as Petitioner's
21 Exhibit 2.

22 The main span of this bridge starts in

1 Missouri at a point near Broadway, is that correct?

2 A. I believe so.

3 Q. And it extends across the Mississippi
4 River, it extends over Illinois property, and then
5 the main span comes down it looks east of the Norfolk
6 Southern lines.

7 Do you see that?

8 A. Yes.

9 Q. And I can represent to you that this bridge
10 is about 6,000 plus or minus feet long. It's
11 covering railroad tracks and property on Missouri,
12 it's covering the Mississippi River, and it's
13 covering railroad tracks of multiple railroads on the
14 Illinois side, is that correct?

15 A. Yes, it is.

16 Q. Now, these design standards that have been
17 alluded to that TRRA says it adopted by the BNSF/UP
18 Design Standards, they're just one set of design
19 standards. Other railroads have other sets of design
20 standards.

21 Is that your understanding?

22 A. Yes, it is.

1 Q. And these design standards not only talk
2 about fencing; that's one small portion. There are
3 many other areas discussed in these design standards
4 that are drafted by railroads, is that correct?

5 A. That is correct.

6 Q. Do you think it would be problematic for a
7 designer of a bridge that's 6,000 feet long that's
8 over waterway that's over several different railroads
9 to have to juggle design standards from four, five,
10 or six railroads?

11 A. It would be very difficult plus very
12 expensive.

13 Q. So in other words, would you, in your
14 professional judgment, say it would be unreasonable
15 to expect a public agency designing a bridge to say,
16 okay, now we're over the TRRA tracks. We've got to
17 follow this set of design standards. Now a couple
18 hundred feet later we're over the Norfolk Southern
19 tracks. We're going to have to follow their set of
20 design standards, and now a few hundred feet later,
21 we're over another set of tracks, and we've got to
22 follow their set of design standards.

1 That would be physically impossible,
2 wouldn't it?

3 A. Again, that would be very difficult and
4 very expensive, and I would most likely think that a
5 contractor would come back and try to do a value
6 engineering on it, but, of course, the procedures
7 would be such that we'd have to go back to the
8 agreement.

9 Q. So the designer of this bridge has to deal
10 with multiple railroads, has to deal with crossing a
11 river, and has to deal with 6,000 feet of bridge.

12 Is that a large project in your
13 professional experience?

14 A. That is a very large project.

15 Q. In fact, it's one of the largest bridges
16 that has been built lately, isn't it?

17 A. It's one of just a handful that we're very
18 fortunate to be involved with.

19 MR. REDMOND: That's all the questions I have.

20 JUDGE JACKSON: Ms. Lemley, not to beat a dead
21 horse, I'll give you one more shot.

22 MS. LEMLEY: Thank you, Your Honor.

1 JUDGE JACKSON: You're almost finished, but
2 please limit the questions to what you heard on
3 redirect.

4 MS. LEMLEY: Yes.

5 RECROSS-EXAMINATION

6 BY MS. LEMLEY:

7 Q. You had testified looking at the AASHTO
8 LRFD Bridge Design Specifications, and you pointed
9 out that it's under the heading of "Clearances."

10 A. Uh-huh.

11 Q. And you drew some conclusions from that in
12 your testimony.

13 I will turn your attention back to the
14 memo marked as Exhibit D.

15 A. Yes.

16 Q. That's from the Federal Highway
17 Administration interpreting the CFR standards we went
18 through in your testimony earlier.

19 A. Yes.

20 Q. On the first line of that memo, it says,
21 "Attached for your information is our response to
22 Mr. David Pope, Chairman of the AASHTO Highway

1 Committee on Bridges and Structures."

2 So this memo is directed toward the
3 AASHTO chairman on how to interpret the requirements,
4 is it not?

5 A. Yes, it is.

6 Q. And it states that structures designed to
7 pass over a railroad shall be in accordance with
8 standards established and used by the effective
9 railroad in its normal practice. Correct?

10 A. That's what it says.

11 Q. That portion of this memo is under a
12 paragraph that says railing parapet requirements and
13 fencing, and in parentheses (highway over railroad).
14 Correct?

15 A. That's what it is.

16 Q. You testified about the danger of debris
17 falling over a highway parapet.

18 Do you remember that?

19 A. Yes.

20 Q. Have you ever studied the amount of debris
21 that comes over a highway, an interstate highway onto
22 the ground below?

1 A. No, I have not.

2 Q. You're not an expert in what type of debris
3 or how much falls over the side of the highway?

4 A. No, I could not say that as an expert.

5 Q. You talked about the 32-inch parapet versus
6 the 42-inch parapet.

7 I think you testified before you
8 weren't involved in the decision to raise it from the
9 32 to 42?

10 A. I don't believe I was, no.

11 Q. And you can't remember when that decision
12 was made?

13 A. It obviously was made quite a while back
14 because the design drawings have been submitted for a
15 while.

16 Q. You said that a TL-5 rating may be
17 appropriate where there's a curvature in the road or
18 whatever the standards state for a TL-5 rating. You
19 can certainly state it better than I can.

20 A. I think engineering judgment is, in this
21 case, I think it warrants maybe a wider bridge, but
22 unfortunately, the states didn't have the dollars, so

1 we do anticipate a lot of traffic, probably a lot of
2 truck traffic, and, as I said, there is a horizontal
3 curve which is a part of the engineering judgment
4 that should be applied to your railing needs.

5 Q. Now, I am looking at Exhibit 2, and am I
6 correctly identifying the curvature that you're
7 talking about?

8 A. Yes, it is, but I think your tracks are
9 near the end of the curvature if I recall, towards
10 the river.

11 Q. Would you like to point that out?

12 A. Let's see.

13 Yes, I think these are your tracks
14 right here. Tracks, TRRA, TRRA.

15 Q. And this is the curvature you're talking
16 about, right?

17 A. Yes.

18 Q. Because it's obviously a curve.

19 A. So as you come up, there is a transition,
20 and there the curve ends, and it goes on tangent.

21 Q. You talked about having to juggle all of
22 the standards of the railroads in determining what

1 the safety standards are and trying to implement that
2 and how much of a hardship that would be.

3 Wouldn't it just be -- and I know this
4 is academic because you told me before that you don't
5 review railroad standards for fencing on overpasses
6 before you design it anyway, correct?

7 MR. REDMOND: Your Honor, I'm going to object.
8 If there's a question, there's a question, but a long
9 recitation prior to a question I think is an
10 objectionable type of question.

11 JUDGE JACKSON: I want to hear the whole
12 question again.

13 MS. LEMLEY: From the court reporter or from
14 me?

15 JUDGE JACKSON: Either way.

16 MS. LEMLEY: Okay.

17 JUDGE JACKSON: Did you want to rephrase it?

18 MS. LEMLEY: Sure.

19 Q. You've testified before that you don't
20 consider railroad safety standards for fencing on
21 overpasses when you design an overpass, correct?

22 A. We don't feel there's fencing needed on an

1 interstate bridge.

2 Q. That was my point in this all being
3 academic.

4 But if you were considering fencing on
5 this overpass, wouldn't it be simpler just to
6 implement the safest design dictated by one of those
7 standards versus the juggling that you've discussed
8 before?

9 A. That's a potential, but again, as mentioned
10 before, they may be unique in some way that you have
11 to then determine which one governs, and that may be
12 difficult.

13 Q. Difficult.

14 A. Yes.

15 MS. LEMLEY: That's it. Thank you.

16 JUDGE JACKSON: Mr. Blair?

17 MR. BLAIR: No questions.

18 JUDGE JACKSON: Thank you, Mr. Anderson.

19 (Witness excused.)

20 JUDGE JACKSON: Does petitioner have any
21 additional witnesses?

22 MR. REDMOND: We do not, Your Honor.

1 JUDGE JACKSON: Thank you.

2 In that event, it's about 20 after 4,
3 not quite, this afternoon. We're getting together
4 again. It will be one more day, so we need to go off
5 the record and pick a date.

6 (Whereupon an off-the-record
7 discussion transpired at this
8 time.)

9 JUDGE JACKSON: Okay. We're going to go back
10 on the record.

11 We've agreed to a date for the next
12 hearing.

13 Before we get there, I have two things
14 sitting up here on the rail that we need to deal
15 with.

16 I have an affidavit of Patrick
17 Prososki which has been marked Exhibit No. G. It
18 looks like the original. I don't want it until it's
19 been offered, so you can take that back.

20 MS. LEMLEY: Okay.

21 MR. REDMOND: Your Honor, since you have
22 reserved ruling on the exhibits, my suggestion is

1 that we would send you some sort of letter with the
2 exhibits that we intend to offer so we can make it as
3 efficient as possible.

4 I don't want to rest before we've made
5 that offer of exhibits.

6 JUDGE JACKSON: Oh, I will not let you rest
7 until we've done it.

8 I figured since both sides have used
9 each others' exhibits quite liberally, we'll do them
10 all at once at the conclusion.

11 MR. REDMOND: At the conclusion.

12 JUDGE JACKSON: At the conclusion.

13 MR. REDMOND: Okay.

14 JUDGE JACKSON: I have a motion sitting here.
15 I don't know if it's an original but it was on the
16 rail. It's TRRA's motion for leave to exchange and
17 file additional exhibits.

18 What is that?

19 MS. LEMLEY: That's the additional exhibits
20 that we e-mailed yesterday evening and which we've
21 already discussed.

22 JUDGE JACKSON: All right.

1 MS. LEMLEY: No new ones.

2 JUDGE JACKSON: And the exhibits referenced
3 here, have we used any of them yet? I haven't read
4 it.

5 MS. LEMLEY: We only used the one MoDOT drawing
6 with Mr. Horn that Mr. Redmond was okay with.

7 JUDGE JACKSON: All right. So since we're not
8 getting together for another week, I don't see a
9 problem in planning the motion for leave to exchange
10 and file them and then we deal with each one
11 individually as it comes up.

12 Mr. Redmond?

13 MR. REDMOND: That's fine, Your Honor.

14 JUDGE JACKSON: All right. So that motion will
15 be allowed.

16 If this is the original, I'll take it
17 upstairs.

18 Did you file it on e-docket?

19 MS. LEMLEY: No.

20 JUDGE JACKSON: Oh, okay. Why don't you do
21 that too.

22 MR. DUGGAN: We're not signed up to do that I

1 don't think, to file E.

2 JUDGE JACKSON: All right. Then, Mr. Duggan,
3 if you would please file it in the walk-in center,
4 and then they will do it, e-docket it, and it will
5 get to me.

6 All right. We are continued to
7 Thursday, August 13, 2009, 9 a.m., same place I would
8 suspect, and we go until we're finished. If that
9 runs us into Friday, so be it.

10 Thanks everyone.

11 (Whereupon the hearing was
12 continued to August 13, 2009 at
13 9:00 a.m.)

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